

Investment opportunities on the rise in India's robotic surgery sector

■ healthcarebusinessinternational.com/investment-opportunities-on-the-rise-in-indias-robotic-surgery-sector

10 October 2024

HBI Deals+Insights / News

Robotic surgery in India has seen a lot of growth over the past decade. According to the Clinical Robotic Surgery Association of India, approximately 60,000 robotic-assisted surgeries are performed annually by more than 1,500 surgeons across specialties including general surgery, oncology, nephrology, pulmonology, cardiology, gynaecology, and orthopaedic surgeries.

HBI spoke with Dinesh Madhavan, President-Group Oncology and International, Apollo Hospitals, India's leading for-profit hospital provider by revenue, about the expanding robotic surgery market in India and the emerging opportunities for private equity investments in the sector.

Madhavan told us the estimated robotic surgery market in India was valued at \$78 million in 2022 and is projected to grow at a compound annual growth rate (CAGR) of 20% through 2030.

“Several factors are driving the growth of robotic surgery in India, including the rising demand for minimally invasive procedures, increased precision, shorter recovery times, improved outcomes, and the affordability of robotic surgical systems. Additionally, initiatives like the Ayushman Bharat program, which provides national health insurance coverage, are making these technologies more accessible to a large portion of the population.”



Dinesh Madhavan, President-Group Oncology and International, Apollo Hospitals

Madhavan also noted that around 50,000 robotic-assisted surgeries are now performed annually across the country, with increasing adoption not only in metropolitan areas but also in Tier 1 and Tier 2 cities. “At Apollo Cancer Centres (ACC), which has a network across India, we perform over 3,800 procedures every year. To date, 17,000 robotic surgeries have been completed across various Apollo Hospitals units,” Madhavan added.

“Robotic surgery is making India a top destination for medical tourism”

Over the past decade, CyberKnife technology has expanded its applications from treating brain and spine tumours to addressing complex conditions in the lungs, liver, and prostate. This evolution has allowed for precise, non-invasive cancer treatments across a broader range of specialties.

“Apollo Cancer Centre, Chennai, was the first in the country to introduce CyberKnife in 2008, and the first in Asia-Pacific to introduce Renaissance Robotic Technology for spine surgeries, significantly improving patient outcomes and recovery times. India’s skilled physicians, cost-effective healthcare, and short waiting times also make it a top destination for medical tourism,” Madhavan said.

Increasing opportunities for private health insurers and investors

Madhavan said, “Private health insurance companies in India generally cover the costs of robotic surgery, creating a growing market opportunity for investors. However, investors should be mindful of variations in coverage based on procedure type and individual policy terms.”

“Another key development is teleoperation, which enables surgeons to perform procedures remotely, overcoming geographical barriers. Additionally, artificial intelligence (AI) and machine learning (ML) are enhancing surgical decision-making by improving the recognition of complex anatomical structures, leading to greater precision and accuracy.”

Innovations like AI-driven automation, nanorobots, minimally invasive microscopic surgeries, semi-automated telerobotic systems, and the transformative impact of 5G on remote surgeries highlight the ongoing advancements in robotic surgery. These developments, Madhavan noted, create opportunities for investors in the healthcare sector.

We would welcome your thoughts on this story. Email your views to [Rakshitha Narasimhan](#) or call 0207 183 3779.