Sector Profile

THE MEDICAL DEVICES AND EQUIPMENT INDUSTRY

The Medical Devices and Equipment industry, valued at US$ 2.5 billion contributes only 6% of India's US$ 40 billion healthcare sector. Moreover, it is growing at a faster annual rate of 15% than 10-12% growth seen in the Healthcare sector in its entirety. A rise in the number of hospitals and the increased requirement for healthcare facilities creates a need for sophisticated devices and equipment, which can provide accurate treatment to individuals. The Medical Electronics segment of this industry incorporates control, conversion, sensing, processing, storage, display, and transfer of information on anatomy and physiology by making use of the Electronics and Communication Technologies. The Medical Equipment industry is quite wide with > 14,000 different products types, as per the Global Medical Device Nomenclature (GMDN). The products range from wound closure pads to stents and IVD machines of medical devices. Further, it can be reasonably said that Medical Electronics is an area, where Electronics and Information Communication Technology play a decisive role.

Moreover, significant efforts have been made in the medical technology ecosystem to stimulate innovation in this space so that the opportunities provided in the Indian market can be capitalized by the companies working in this domain and the Indian consumer of healthcare services stands to benefit.

In the past, the sector has significantly brought down the incidence of disease among patients, families, society as well as improved the country's health system, significantly. However, in India the penetration of medical devices is low and inadequate due to the barriers that prevent their usage.

Promotion of the Sector by the Government

The government is expected to develop a regulatory structure leading to quality products being developed by manufacturers. However, the current regulatory structure lacks active participation from the government but with the increase in competition in the sector, this is just a matter of time. The last few years have seen an increase in domestic manufacturing of medical equipment. With impetus from Government of India schemes, India is beginning to look forward to being recognized as a manufacturing destination for sophisticated medical technology.

The Private and Foreign Investments

International companies in this field are also using India as a manufacturing base by either setting up facilities of their own or by acquiring domestic manufacturers. Some examples include 3 M's manufacturing plant in Pune, Becton Dickinson's manufacturing facility in Haryana, Hollister's setting up manufacturing facility in India and Philips Medical Systems' acquisition of Medtronics and Alpha X-Ray Technologies. Medical Technology Parks have been proposed by the Government of India in addition to the existing parks to encourage domestic manufacturing of medical equipment.

FDI inflow will spur R&D and manufacturing innovations, in turn increasing the efficiency and effectiveness of medical electronic products. Advancement of medical electronic product quality and associated successful diagnostic rates are expected to create a spurt in adoption.

Some of the leading Medical Device and Medical Electronics Companies Operating in India

1. *3 M*
2. *India Medtronic*

3. *Johnson & Johnson*
4. *Becton Dickinson*
5. *Abbott Vascular*
6. *Bausch & Lomb*
7. *Baxter*
8. *Zimmer India*
9. *Edwards Life Sciences*
10. *St. Jude Medical*
11. *Stryker*
12. *Boston Scientific*
13. *BPL Healthcare India*
14. *Sushrut Surgicals*
15. *Trivitron Diagnostics*
16. *Accurex Biomedical*
17. *Biopore Surgicals*
18. *Endomed Technologies*
19. *Forus Health*
20. *HD Medical Services (India)*
21. *Eastern Medikit*
22. *Harsoria health care*
23. *Nidhi Meditech System*
24. *GE Healthcare*
25. *Philips Medical*
26. *Wipro Technologies*
27. *HCL Technologies*
28. *Texas Instruments*

Role Played by Major Competitors in the Medical Technology Sector

Medical Technology companies are undertaking a lot of innovations out of India, both, for the domestic as well as the overseas markets. Transasia Biomedicals has developed *in-vitro* diagnostic equipment through its R&D base in Mumbai. The Sushrut Adler Group has developed an external fixator for the Indian market. Johnson and Johnson has developed a knee implant suitable for the Indian market as well as a reusable stapler for use in surgeries at price points, which are amenable to the Indian market. Roche Diagnostics has developed a screening device for cardio-vascular diseases, which is suitable for use in rural settings. GE Healthcare has developed a low cost ECG machine and a low cost Ultrasound machine for the Indian market. Philips Healthcare is using its recent acquisitions in India to develop and launch a low cost Cath Lab for the Indian market.

Drivers for Growth of Medical Technology Sector in India

- Economic growth leading to higher disposable incomes
- Increased Public Spending in Healthcare
- Increased Private Investment in Healthcare
- Increased Penetration of Health Insurance
- Emergence of new models of healthcare delivery
- Public Private Partnership (PPP) route to Innovation

Key Challenges Faced by the Sector

- Low Penetration
- Accessibility
- Affordability
- Awareness
- Nascent Regulatory Environment
- Low Indigenous Manufacturing
- No Distinct Status of the Industry
- Need for Quality Benchmark at par with the Global Standards
- Complex Rules and Guidelines
- High Capital requirement

Recommendations for Government to Improve Sector

- Move toward adoption of the Global Harmonization Task Force's (GHTF) definition and rules-based classification of medical devices.
- Work towards making legislative amendments to enable comprehensive Medical Device Regulations.

- Urgent Necessity for resource, funds allocation for training and skill up gradation.
- Evolve medical technology clusters with common facilities for development, calibration, testing, quality control, waste management etc. hence, creating an ecosystem for the benefit of SME's focusing on medical technology.
- Increase public spending in healthcare from 1% of GDP to 3% of GDP to radically alter the provision of healthcare services.
- Encourage greater collaboration between medical centers and technology universities.
- Increase the quality and enhance consistency of training received by medical and paramedical staff thereby providing creative resources for leading medical innovation efforts.
- Include medical technology education within the medical curriculum with assistance from agencies like NIPER.
- Increase the training for regulatory staff especially at the State Level to ensure consistent interpretation of regulatory approval processes for which partnership with Industry associations maybe considered as a practice instead of sporadic efforts.
- Usher further reform in the insurance sector to stimulate health insurance thereby providing the financial incentives for medical technology innovation.
- Set up a venture investment fund to address the lack of early stage venture capital