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### Introduction

Medical technology (MedTech) companies are looking to expand their footprint in India as the market here is seen growing at a fast clip. A Wipro internal research shows the Indian medical device and equipment market is expected to nearly double from about USD4.5 billion by 2016. India is fast earning a reputation of being the destination for affordable and reliable medical care and, thus, is emerging as one of the top three nations for direct investments by multinational MedTech companies.

So, how can MedTech companies drive sustainable growth and position themselves for success by venturing into new markets beyond Tier-I cities? The answer lies in innovation – of products, services and business models.

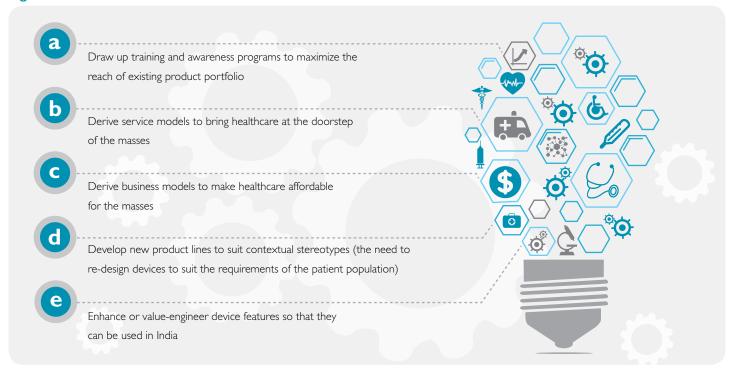
## Moving From Importing To Innovation

There is a need to use medical technology effectively to address the huge gap between demand and supply of healthcare services in India. The medical technology sector in India is at a nascent stage with very limited indigenous manufacturing. In fact, imports still constitute a large part of the current 4.5 billion USD medical technology market. But that does not limit its future and the sector is rapidly expanding.

However, there is a clear distinction in the way medical devices are used in India compared with the West. And, therefore, the global medical device companies would need to understand healthcare infrastructure, socio-economic patterns, contextual needs, and existing stereotypes that drive the use of medical devices in India.

In order to introduce the medical devices to suit Indian needs, MedTech companies would have to diversify their product portfolios. Some key steps that companies will need to take to make their product portfolio Indian-market ready are: (refer Figure 1)

Figure I



MedTech companies'strategies need to include relocation of manufacturing and R&D units closer to emerging economies. This will enable the medical device companies to improve manufacturing efficiency, lower production costs and develop products that serve the local markets better.

Given the differentiated conditions, medical devices need to be either designed from scratch or remodeled for the Indian market in particular and emerging markets in general. The key factors influencing the redesigning of medical devices are affordability, accessibility, awareness, availability and adaptability.

An ecosystem for innovation needs to be created that will enable global MedTech companies to overcome entry barriers and address localization issues. They will need to have a clear strategy to stand out from local competition, overcome infrastructure challenges and grow in the market through awareness sessions and training programs.

# The Three Mainstays of Innovation

While speaking to several specialized physicians and surgeons across therapeutic areas, it is apparent that India is no exception to embracing devices with new technologies that global MedTech companies are introducing through various channels, including training and awareness initiatives. Global MedTech companies will need to do some research to feel the intrinsic pulse of the Indian market to incept, design and develop new product solutions for India.

The areas in which companies need innovation to diversify their product portfolios are:

#### a) Business Model Innovation

In the innovation-driven healthcare sector, adaptability to new business models is of utmost importance. The changing patient dynamics and demographics (increasing internet penetration and growing awareness about ailments) are forcing healthcare providers to rethink new business strategies to keep track of their patients' profiles across the care path.

Healthcare expenditures are extremely high in most parts of the world, raising important questions about the sustainability of healthcare provisions. The answer lies in creating smart and innovative business plans. The question of how to provide the most cost-effective healthcare services has been of increasing interest to healthcare managers, health insurers, providers, patients, and governments. In such a scenario, Financial Affordability Solutions can prove to be the much-needed competitive differentiator.

#### b) Service Design Innovation

It is the constant endeavor of MedTech companies to ensure delivery of affordable and efficient healthcare to the patients, and service design innovation can help in this regard.

In diabetes, the cost of the common syringe needle with vials and pen needles need to be optimized to make them affordable for the rural population.

Diabetes care in India has a huge market for self-diagnosis, self-monitoring of blood glucose, affordable insulin pumps and alternatives to patch pumps. Patients would need a regular supply of needles and cartridges for effective monitoring of insulin. A better way to penetrate the market would be to use smart service designs that will ensure the availability of supplies at nominal cost and would remotely take care of patient biometrics.

Vaccine delivery systems in India need better cooling technology so that there is less wastage of non-sterile vaccines and improved data management in outreach programs. The design of vaccine vials should be such that it warns the healthcare worker from using a non-sterile vaccine and smart data management systems should enable them to track the vaccines delivered to the masses in different locations.

#### c) Product Design Innovation

Since MedTech companies are still largely importing products to India, a lot of times these products may not fit the needs of the domestic consumer. The patient profiles in India are very different and this necessitates an innovation in product design.

For instance, for the surgical treatment of hypermobile urethra, autologous tissues (tissue collected from the patient themselves) are used in India instead of the external slings that are used for patients in the West.

A minimally-invasive thoracic surgery is still in its nascent stages in India. Currently, cardio-vascular surgeons in India acquire certified trainings in thoracic surgeries from the West to use minimally-invasive techniques to treat thoracic cancer. However, majority of the surgeons in India believe invasive techniques and open surgeries are more effective and less time consuming as opposed to video-assisted techniques. The minimally-invasive techniques involve more mental fatigue and increased time required for ligation of vessels. It is also a steep learning curve as one has to adapt to new techniques with specialized tools. This forms a sound ground for innovation of products and hybrid procedures in the preferred line of treatment in the Indian context.

## The Promise of a Better Future

Innovation across products and services has had a huge impact on our lives. But it is in healthcare that innovation is of existential importance. Innovation in this sector directly impacts the well-being of our future generations. The challenges and limitations we face today should act as a base for future progress.

The key innovation trends in healthcare should help in developing affordable medical devices to extend the reach and accessibility of healthcare services beyond Tier-I cities. It is now in the hands of the healthcare providers to either take up the challenge, innovate and unlock the key to sustainable growth or lose margins in defense of an old business model.

### **About the Author**



#### **Arpita Banerjee - Principal Consultant**

Arpita Banerjee has over 14 years of experience in developing healthcare ecosystems. She has expertise in conducting global research to identify unmet needs of patients, surgeons, caregivers and other key stakeholders.

In her current role at Wipro as a Principal Consultant and subject matter expert in the Medical Devices vertical, Arpita Banerjee brings her expertise in building bridges between Western and Asian businesses through understanding of market dynamics, business relations, and corporate competitiveness.

## **About Wipro Ltd.**

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