MIT SCALE RESEARCH REPORT

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This reprint is intended to communicate research results of innovative supply chain research completed by faculty, researchers, and students of the Global SCALE Network, thereby contributing to the greater public knowledge about supply chains.

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Research Report: ZLC-2016-8
Unlocking Value added services in Bio-Pharmaceutical Industry
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KEY INSIGHTS

1. In general, cancer patients are becoming increasingly aware of different aspects related to their treatment. They are demanding information transparency and are more than willing to be involved in their treatment journey.

2. Technology is the core to most of the value added service (VAS) models currently available in market.

3. The key focus for any immuno-oncology service model should be the patient health monitoring between two infusion (drug administration) appointments.

4. It is imperative to collaborate with other stakeholders like physicians, pharmacists, and healthcare providers etc. to deliver VAS more effectively. A robust value proposition must be defined to incentivize them to collaborate with the bio-pharmaceutical company.

Introduction

The emerging long-term picture of bio-pharmaceutical industry is exciting, with many disruptive innovations. However on a long term, a biopharmaceutical company has to maintain competitiveness by ensuring affordability, quality, and delivery performance. [Mckinsey Report: Otto et al. 2014].

Within this scenario, a bio-pharmaceutical global leader (BPC) is trying to understand the unmet patient needs in immuno-oncology space and how they can devise a service strategy to meet those needs with compliance. This thesis is a humble attempt to close this gap and help the industry evolve with innovative service offerings. The scope of the project is limited to immuno-oncology space in France, which is a key market for the sponsoring company.

If a robust service strategy can be devised and implemented, it will not only give a competitive advantage to the sponsoring company, but will drive the industry forward towards the ultimate goal of making life easier for patients.

Methodology

We started with thorough literature review, which was done to understand the current VAS landscape in biopharmaceutical industry. Apart from this, a competitive benchmarking was performed with 11 close competitors. In the best interest of the thesis, we did not limit our competitors to only immuno-oncology area as we realized that we may come across many nice examples of VAS from other therapeutic areas as well.

Later, we conducted face to face and telephonic interviews with many healthcare professionals from France and Spain, over a period of 3 months. We had 12 such interviews in Barcelona and 6 in Paris. Apart from this, telephonic interviews were also conducted with professionals in Barcelona and Madrid, whenever it was deemed necessary.
Also, separate questionnaires were designed for prescribers and hospital pharmacists in France. Although we could not complete the survey in time due to legal complications, the questionnaires have been included as a part of the thesis for future reference.

Models developed

Based on both primary and secondary research, we developed the service models for the two intended service channels (Direct to patient via IT model, collaboration model with healthcare providers).

**Model 1 - Direct to patient via IT Model (Mobile APP)**

Our proposed APP platform is a comprehensive service bundle, which is currently not available in the market.

As shown in Figure 2, the idea is to link the de-identified portion of the data, retrieved from the Hospital ERP to the mobile APP. Critical data elements like adherence data, side effects data etc. can flow both to backend database administrators as well as Hospital ERP. A healthcare coach or hospital pharmacist can make use of this data to help the patients in their journey. This unique model, if applied on the principles of data security, forms the backbone of our value added service (VAS) offerings. The six VAS offering for which we have developed functional specifications are “Treatment adherence”, “Appointments support”, “Possible Drug interaction”, “Side effects Management”, “Patient education and management” and “Oncology updates”. We also performed a NPV analysis for this investment, taking in to account the additional revenue due to expected increase in adherence.

**Model 2 - Collaboration with healthcare providers**

When a patient, visiting a hospital, is prescribed immun-oncology product, he/she is automatically entitled to all the services offered by the proposed “Integrated Care Centres”. The Hospital is expected to provide the necessary infrastructure to carry out the operations. BPC is expected to take care of all expenses related to the salaries of full time oncologists, pharmacists, nurses, administrative staffs and psychologists etc., necessary to offer the intended services.

The VAS offerings that can be provided by these centers are “On Call support”, “Home care infusion”, “Workshops around Patient education and Lifestyle management” etc.

Our model is a win-win situation for all the key stakeholders (i.e., the patients, the hospital as well as BPC) as we have strong value proposition for all the parties involved.

**Conclusion**

We found that the amount of financial risk the company would subject itself with Model 1 investment is negligible. However the legal, regulatory, IT-security and brand image risks are significant and need to be factored. In Model 2, a strong value proposition exists for hospitals but convincing the key opinion leaders and overcoming the regulatory barriers are again the biggest challenges. However a pilot run can be carried out in Paris and then a decision can be taken if the model is scalable. Overall both the models are innovative and first of its kind for bio-pharmaceutical industry.

**Cited Sources**