

## White Paper: Extending the Life Sciences and Pharmaceutical Supply Chain



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*A comprehensive analysis of how value-added services are revolutionizing the pharmaceutical supply chain.*

## **Introduction**

An inefficient pharmaceutical supply chain can cause serious problems including dangerous product degradation and late deliveries of life-saving medications.

Third-party logistics (3PL) providers specialize in streamlining their customers' supply chains by merging logistics expertise with state-of-the-art innovations. Traditionally, providers have focused on a specialized set of services centered on warehousing, order fulfillment, transportation and supply chain logistics.

However, many 3PLs are extending further into customers' supply chains by adopting services beyond this traditional scope. This white paper will explain how 3PLs are extending their customers' life science and pharmaceutical supply chains by incorporating special projects. The paper will also identify the motivations behind this change and the benefits both parties experience as a result.

## **Background: A Crucial Look at Inefficiencies**

"Supply chain" is a term that characterizes the entire process of creating and supplying a product. Every "link" in the chain serves an important function, from delivering raw materials to compound, through final delivery to a hospital, retailer or consumer.

A company's supply chain is the backbone of all operations. Problems in this area can trickle down, causing costly overages or damaging shortages. As such, it is a natural area where manufacturers should maximize efficiency<sup>1</sup>.

In 1996, the Efficient Healthcare Consumer Response report suggested that revamping old healthcare supply chains could save more than \$11 billion<sup>2</sup>. Since then, 41 percent of manufacturers reported they have adjusted supply chain operations in an attempt to implement the suggested changes<sup>3</sup>.

As a result, pharmaceutical companies are utilizing assets more efficiently. For example, between 2004 and 2009, manufacturers reported an overall increase in equipment effectiveness in packaging and quality inspection performance. However, growing logistical inefficiencies in set-up time indicate that companies still struggle to adjust to a variable demand flow. As a result, they must hold large quantities of inventory, which drives up working capital and overhead expenses<sup>1</sup>.

The pharmaceutical industry is in a state of flux, with many manufacturers searching for ways to distinguish their products in an increasingly competitive marketplace. Many do this by partnering

with 3PL providers, who are starting to offer value-added services that extend supply chain operations and maximize efficiency.

## **Background: Extending into Value-Added Services**

In order for supply chains to remain efficient in a changing pharmaceutical industry, buyers and manufacturers need to move from a transactional focus to a process focus. This means evolving from making decisions based merely on costs to looking at the overall strength and value of their relationship with their 3PL partners<sup>4</sup>.

Extending the pharmaceutical supply chain for special projects, such as packaging and kitting, has become more common amongst 3PL providers. However, service offerings can vary based on the needs of a provider's customers. Some innovative 3PLs have evolved to offer the following solutions:

### *Inourced Vendor Managed Inventory (VMI)*

Some manufacturers can't afford to implement drastic workflow changes or move supply chain operations to a 3PL's location. To accommodate this inflexibility, 3PL providers can insource their logistics solutions within a customer's facility. From updating Warehouse Management Systems to streamlining internal business processes, insourcing VMI allows 3PLs to use their expertise, technology and infrastructure to solve customers' internal problems.

### *Repackaging and relabeling*

Only 3PL providers licensed by the Food and Drug Administration are able to relabel and repackage pharmaceuticals. This ensures the provider can adhere to crucial manufacturing protocols and protect the product's integrity while making necessary manipulations to packaging or labeling.

### *Kitting*

Pharmaceuticals may require supplementary materials for application or informational purposes that need to be kitted with the drug. 3PL providers can seamlessly integrate this value-added solution into their regular warehousing and handling services.

### *Serialization*

Counterfeit medications have been a problem in the pharmaceutical industry for more than a decade, posing serious risks to patients. In response, legislation has passed to mandate serialization – unique barcodes that make the drugs difficult to counterfeit. Innovative 3PLs are in front of this change, offering customized packaging and delivery solutions to easily integrate manufacturer-serialized units into the distribution process.

### *Foreign Trade Zones (FTZ)*

Having FTZ status means that when a customer's imported product arrives at a U.S. port, it can be immediately moved to secure facilities without waiting for customs clearance. This rapid turnaround is a significant advantage when dealing with the delivery of sensitive

pharmaceuticals, most of which require storage at a constant temperature of 2 to 8 degrees Celsius.

### **Solution: Value for Both Partners**

When 3PL providers extend their customers' pharmaceutical supply chain through value-added services, they are building the foundations of an important and mutually beneficial relationship. There are many additional benefits in adopting innovative approaches to the life sciences and pharmaceuticals supply chain.

#### *Organic growth*

3PL providers are always developing and implementing new value-added services. This continuous organic growth gives customers an opportunity to continuously evaluate and alter their supply chains.

#### *Cost optimization*

Partnering with a 3PL to integrate special projects into existing supply chain operations mitigates costs associated with developing and implementing new services. From allocating labor for a relabeling project to bringing in equipment for a special packaging task, 3PLs can address needs while mitigating unnecessary overhead expenses.

#### *Flexibility*

Many extended supply chain services evolve from market or regulation-driven needs that require immediate solutions. Because of their expertise in logistics, and eye towards the bottom line, 3PL providers can integrate these projects as natural extensions of existing supply chains, ultimately growing them into long-term, value-added services.

#### *Scalability*

When warehousing and distributing pharmaceuticals, recalls, relabeling or fulfillment can potentially be the difference between life and death. Pharmaceutical manufacturers must be able to immediately conceptualize and implement urgent solutions. 3PLs have an unmatched ability to scale and repurpose labor to address any time-sensitive needs.

#### *Trust*

An existing partnership between a 3PL and its customer is a trusted relationship that can expand to include new services. Working with a trusted provider to solve problems and develop solutions is a reliable path, especially when handling a delicate pharmaceutical supply chain.

#### *Responsiveness*

3PLs provide a ready and available workforce that can be flexed and scaled to meet a customer's needs in a timely manner. Constant management oversight and collaboration streamlines these value-added services and keeps them responsive to evolving needs.

### *Resourcefulness*

3PL providers have a flexible infrastructure that allows them to manage labor and handle additional necessities, such as dedicated equipment or packaging.

### *Specialized expertise*

Warehousing, fulfilling and distributing sensitive medications requires specialized knowledge. Licensed and certified 3PL providers are equipped to incur the high risks associated with handling a pharmaceutical supply chain, since failure to comply with strict regulations can result in costly fines or dangerous product degradation.

## **Conclusion**

Today, 3PLs must be able to handle many projects outside the scope of traditional services. These solutions give 3PLs the chance to bring greater value to their customers, while helping manufacturers facing the reality of tightening budgets.

## **Resources**

1. [“Supplying the future: Which path will you take?” from PWC Pharma 2020](#)
2. [“How Logistics Can Service Healthcare” from Supply Chain Forum](#)
3. “Efficient Healthcare Consumer Response Update” from Association for Healthcare Resource & Materials Management
4. [“Blueprint for an Efficient Health Care Supply Chain” by Lynn James Everard, C.P.M., CBM](#)