The Pharma SUPPLY CHAIN

Today's pharmaceutical supply chain, which is fraught with complexity, needs to be overhauled to meet the future demands of the market.

he pharmaceutical supply chain is a complex system through which prescription medicines, biologics, and devices are delivered to patients. The Kaiser Family Foundation lays out the distribution channel as such: products originate in manufacturing sites, they are then transferred to wholesale distributors. These products are then stocked at retail, mail-order, and other types of pharmacies.

Products are subject to price negotiations and processed through quality and utilization management screens by pharmacy benefit management companies (PBMs); dispensed by pharmacies; and ultimately delivered to and taken by patients. There are many variations on this basic structure, as the players in the supply chain are constantly evolving, and commercial relationships vary considerably by geography, type of medication, and other factors.

Pharma companies have to manage incredibly complex supply chains and manage the operational challenges of working and interacting with huge numbers of suppliers contributing ingredients and components to

Top 10 Global Pharmaceutical Supply Chain Challenges

- 1. Lack of coordination
- 2. Inventory management
- 3. Absent demand information
- 4. Human resource dependency
- 5. Order management
- 6. Shortage avoidance
- 7. Expiration
- 8. Warehouse management
- 9. Temperature control
- 10. Shipment visibility

Source: Natalie Privett, Assistant Professor of Management and Policy at the Robert F. Wagner Graduate School of Public Service at New York University, and David Gonsalvez, Professor of Supply Chain Management at the MIT-Zaragova International Logistics Program

drug production. And now they need to meet track and trace directives and comply with new serialization regulations that require inventory to be auditable as it moves through the supply chain.

According to Natalie Privett, assistant professor of management and policy at the Robert F. Wagner Graduate School of Public Service at New York University, and David Gonsalvez, professor of Supply Chain Management at the MIT-Zaragova International Logistics Program, companies should consider if their existing supply chain management systems and processes provide:

- 1. Accurate information across the entire chain at any point and at any location
- **2.** Instant access to real-time updates and alerts if issues are detected
- 3. Visibility of all handovers in the supply chain
- 4. Traceability back to source of all materials
- 5. Seamless collaboration between all parties

Traditional ERP systems do not provide a holistic and complete view of the production and movement of goods from start to finish that is now needed. With these traditional models, they say each link in the supply chain has its own systems that often cannot connect into each other so the level of visibility so desperately sought is difficult, if not impossible, to achieve. Networking suppliers, partners, and logistics providers along the supply chain can offer a more comprehensive view of activities. Organizations need a collaborative system that is equipped with reliable information throughout the supply chain.

According to analysts at PwC, the supply chain, the link between the laboratory and the marketplace, needs a thorough revision. Most pharma have complex supply chains that are underutilized, inefficient, and ill-equipped to cope with the sort of products coming down the pipeline. Furthermore, they say by 2020, the more diverse product types and therapies with shorter product lifecycles; new ways for assessing, approving and monitoring medicines; increasing emphasis on outcomes; new modes of delivering healthcare where the care is pushed into the community and where access to information on patients will become as important as the products themselves; the growing importance of emerging markets; a

greater public scrutiny impacting the ability to manage risk and compliance; and, tougher environmental controls and regulations will mean companies need to strategically reassess their supply chain approach.

EXECUTIVE VIEWPOINTS



JENNIFER FILLMAN VP and General Manager, Specialty Services, Cardinal Health Specialty Solutions

DELIVERING SUPPLY CHAIN OPTIMIZATION

Real-time data visibility from supply chain partners can improve transparency and allow a manufacturer to appropriately prioritize where supply chain partners should be focused. In turn, this helps reduce costs and increase profitability.

MANAGING SUPPLY CHAIN COMPLEXITY

Manufacturers should employ strategies that increase communication and minimize handoffs and touchpoints. Also, it is critical for manufacturers to select partners they are comfortable with and ensure there is a strong two-way dialogue. Supply chains and channel strategies are increasingly complex with multiple touchpoints and handoffs. Each touchpoint represents an opportunity for the process to break down. Things will break in any process, but it's about how the parties own those breakdowns, who is accountable for resolving them, and then having a strategy to move forward to ultimately ensure the patient gets the needed therapy.

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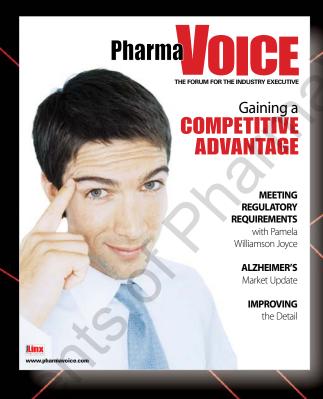
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