

# ActiveInsights PharmaTrack

Secure and Illuminate the Pharmaceutical Supply Chain



## Business Challenges

The supply chain is a crucial link between pharmaceutical companies and patients who consume their products. However, with multi-vendor supply chains, globally distributed operations, and paper-based processes, pharma companies have little or no visibility into what happens in the supply chain from when an item leaves the manufacturer and ultimately arrives at the final recipient. Counterfeiting, cargo thefts, and damage to temperature sensitive drugs while in transit are potential outcomes, raising concerns about pharma product safety and efficacy.

Financial losses incurred by pharma companies from these issues can run into billions. Of greater concern however, is the potential impact on patient safety and the risk these impacts pose to the reputation of the organization. Another key concern is regulatory compliance. Pharma companies must capture and maintain accurate records of product flow across the supply chain. They must have systems in place to report exceptions and must retain information regarding these incidents for legally mandated periods.

Many organizations today find themselves shackled to a motley collection of non-optimally integrated point solutions, in an attempt to achieve these ends. However most often this lacks the supply chain visibility and regulatory compliance agility required by these organizations.

## ActiveInsights PharmaTrack

ActiveInsights™ PharmaTrack by Unisys secures and illuminates the entire pharmaceutical supply chain, providing manufacturers with end-to-end supply chain oversight. The system quickly identifies product authentication issues anywhere along the supply chain, driving both investigation and remediation. In addition, PharmaTrack provides supply chain agents with the ability to verify that accepted pharmaceuticals handed off to the next agent in the chain have not been compromised during their holding period. Designed to work seamlessly with existing logistics management solutions, PharmaTrack combines security and compliance management into a single, unified platform, enabling enterprises to manage all facets of the

supply chain across all points of contact. This allows pharma companies to:

- Enhance supply chain activity visibility and transparency
- Significantly reduce theft, counterfeiting, and receipt of damaged drugs
- Combine logistics management and compliance management into a single, unified platform
- Ensure compliance with both present and known upcoming global pharmaceutical regulations
- Secure all data tracked and transmitted across the supply chain and prevent its unauthorized access
- Ensure medications move from manufacturer to patient safely and securely

## Key Features

The following are the key components/capabilities of PharmaTrack, which enable it to provide visibility, security and compliance in the pharmaceutical supply chain:

**Aligned to GS1 Standards:** GS1 is a global standard for business communication, designed to improve the efficiency, safety and visibility of supply chains across physical and digital channels in multiple sectors. Electronic Product Code Information Services (EPCIS) is a GS1 standard that enables trading partners to share information about the physical movement and status of products as they travel throughout the supply chain – from business to business and ultimately to consumers. It helps answer the “what, where, when and why” questions to meet consumer and regulatory demands for accurate and detailed product information. The PharmaTrack solution uses GS1 barcodes and accesses data stored in the EPCIS database to track and trace pharma products in transit.

**Compatible with Existing Logistics Management Solution:** PharmaTrack does not warrant a replacement of existing logistics management solutions manufacturers and shippers may have in place. PharmaTrack leverages these investments and enhances their impact/outcomes by overlaying additional functionality.

**Unisys Authentication Tracker (UAT) Layer:** Serialization of the supply chain is the basic premise on which PharmaTrack works. The solution accesses the unique codes for products in transit from the EPCIS database. Subsequently, the UAT layer references this data to validate and authenticate transactions across the supply chain. The UAT also provides a communication path between ERPs and PharmaTrack.

**Blockchain/Distributed Ledger:** PharmaTrack captures EPCIS events or ‘chain of custody’ transactions from logistics information from the EPCIS database and stores it in the Blockchain/Distributed Ledger. (A “transaction” in this case is an interaction or transfer of products from one player in the supply chain to another.) This data is stored and tracked for the individual players in the supply chain including manufacturers and shippers. The Blockchain provides a single source of truth, creating a connected supply chain with transparency throughout the entire ecosystem.

**Digital Investigator™:** PharmaTrack tracks and stores transaction data across the supply chain and authenticates it at every transaction. Whenever authentication fails, it triggers a supply chain exception. The exception, in turn, creates a new case in Digital Investigator, used for further investigation by the affected participants.

**Infolmage® for Data Storage:** Documents and data pertaining to supply chain transactions and exceptions are stored in Infolmage. Infolmage contains both analytical and reporting capabilities, used to generate audit and compliance reports.

**Stealth Secured AWS Cloud:** PharmaTrack is a cloud-based solution and resides in the Unisys Stealth® enabled AWS Cloud. Stealth isolates a supply chain as its own Community of Interest (COI) to limit outsiders from seeing users and items within the supply chain.

**Environmental Controls:** There are pharma products that are very sensitive and require storage and transportation under specific temperature and physical conditions. Often, tracking environmental conditions while these products are in transit is next to impossible. Unisys has collaborated with third-party sensor vendors to provide near-real time updates and alerts in case conditions deviate from customer-defined limits.

**Advanced Analytics:** PharmaTrack retains and analyzes historical supply chain data and utilizes advanced analytical capabilities to highlight service and logistics trends and insights for streamlining business steps and identifying potential risks in the supply chain.

## Benefits

Here is how the different components of PharmaTrack unite to secure and illuminate the pharmaceutical supply chain and deliver multiple other benefits.

Components/Capabilities	Benefits Delivered
Compatibility with existing Logistics Management Solution	Leverages current supply chain investments Does not require a major overhaul of existing systems
Unisys Authentication Tracker Layer	Authenticates supply chain transactions at every point in the supply chain Provides instant alerts in case of supply chain incidents and exceptions
Blockchain/Distributed Ledger	Provides a layer of security for supply chain data Delivers transparency across the supply chain and the players involved Transparency for auditors and process automation via Smart Contracts
Digital Investigator	Supports supply chain exception tracking and reporting Allows organizations to take advantage of information across technological and geographic boundaries
InfoImage	Stores and retains supply chain and exception data for compliance reporting Provides analytical capabilities to glean insights from this data to drive intelligent supply chain decisions
Stealth Secured AWS Cloud	Availability, reliability and performance from any connected device Supply chain data protection and limited access
Environmental Controls	Maintains the quality of pharma products that are sensitive to environmental conditions Provides near real-time alerts to enable corrective action if required
Predictive Analytics	Insights to guide future supply chain decisions in order to minimize supply chain costs and improve security

The solution delivers multiple benefits to pharmaceutical companies, carriers and consignees as follows:

- Pharmaceutical companies can recognize the following benefits:
- End-to-end visibility, traceability and environmental controls to secure products in transit
- Advanced analytics leveraging internal and external inputs to drive smart supply chain and operational decisions
- Compliance to DSCSA as well as other global mandates on exception handling and tracking/storage of transaction and exception records

Third Party Logistics Providers and Carriers can experience the following benefits:

- Provides data analytics for supply chain optimization opportunities
- Improves visibility of shipments
- Improves coordination and security while reducing the possibility of human error and theft
- Prepares for new mandates requiring shipment auditability

Consignees in the supply chain can realize the following benefits:

- Validate the authenticity of pharmaceuticals
- Understand any in-transit damage before accepting the shipment
- Ensure pharmaceuticals are safe for patients
- Limit potential downtime in clinical trials

## Next Steps

To explore how ActiveInsights PharmaTrack can help you secure and optimize your pharmaceutical supply chain, please visit [www.unisys.com/activeinsights/pharmatrack](http://www.unisys.com/activeinsights/pharmatrack)

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