



Supply chain insights – Medicine Supply Map

Background

The pharmaceutical supply chain is impacted by factors such as disease outbreaks, climatic, economic, and geopolitical events, and the geographic distribution of manufacturers. Disruptions can lead to drug shortages as well as increases in substandard and counterfeit medicines, putting patients at risk.

Opportunity to strengthen the supply chain

With greater visibility into the upstream supply chain, governments, regulatory agencies, manufacturers, group purchasing organizations, distributors, and others can identify and respond to risks of disruptions sooner, reducing the likelihood of shortages. USP has mobilized its 200+ years of experience, expertise and partnerships to create a resource that helps provide this additional visibility.

USP solution

USP's Medicine Supply Map (MSM) is a graph-based predictive data model that generates insights into the upstream medicine supply chain. Using machine learning and advanced analytics, MSM identifies, characterizes, and quantifies factors linked to supply chain disruptions for drug ingredients and finished drug products. It analyzes over 250 million data points and 24+ data sources from USP, regulatory agencies, and the private sector to develop a more complete and accurate view of potential supply chain disruptors.

Why it's important

MSM analyses of potential medicine supply chain disruptions can offer governments, regulatory agencies, manufacturers, and others the opportunity to prioritize supply chain resilience investments, and identify and respond to risks sooner. Earlier mitigation of supply chain vulnerabilities can help safeguard the consistent availability of high-quality medicines for patients who need them.

Web resources

- <https://www.usp.org/supply-chain/medicine-supply-map>
- <https://www.usp.org/supply-chain>
- <https://qualitymatters.usp.org/are-my-medicines-risk-shortage>