## Critical Supply Chain Stages

<table>
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<tr>
<th>Planning</th>
<th>Sourcing</th>
<th>Manufacturing</th>
<th>Storage</th>
<th>Distribution</th>
<th>Site</th>
<th>Return</th>
<th>Destruction</th>
<th>Analytics</th>
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<tr>
<td>Forecasting and strategy</td>
<td>Drugs, ancillary supplies, and lab materials</td>
<td>Packaging and lab kit production</td>
<td>Warehousing and inventory control</td>
<td>Managing shipments, imports, and exports</td>
<td>Storage and inventory control, sample management, and data processing</td>
<td>Managing shipments, final clinical trial materials reconciliation</td>
<td>Recycling / destruction</td>
<td>Data processing and analysis</td>
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</table>

### Insufficient Communication
Poor coordination of the clinical trial materials supply chain can result in both duplicated effort and action gaps. Errors and changes in strategy mid-trial require frequent plan revisions.

### Process Delays
Since materials suppliers are relatively disconnected from one another, the overarching implications of a supply chain issue may not be apparent or clear, often resulting in delays at trial sites.

### Information Gaps
Very often, overall study timelines are endangered by blind spots inherent in today’s common practices, leading to out-of-stock situations that cause patient recruitment delays, and unexpected expiration of products that result in patient safety issues.

### High Risk of Cost Overruns
Inefficiencies in the system, the difficulty of identifying and addressing all cost drivers, and the potential expenses of corrective actions frequently drive costs well over anticipated budgets.

## Clinical Trial Supplies

### Clinical Logistics Leadership
PAREXEL provides a single point of contact for clinical trial materials management. This efficient approach helps sponsors.

### Accelerate Site Readiness
Intelligent forecasting and developing the best logistics strategy, combined with local expertise for importing clinical trial materials, are key success factors to getting sites online swiftly.

### Minimize Supply Chain Issues
Centralized coordination of the entire supply chain reduces the risk of issues significantly, and allows for rapid response when they arise.

### Reduce Patient Safety Risks
By overseeing all process-critical materials supply tasks, many safety risks such as out-of-stock or unforeseen product expirations are mitigated.

### Create Business Intelligence
A centralized Logistics Service, including IVRS/IWRS and simulation tools, creates a significant knowledge base of historical data for planning future projects.

### Optimize Overall Costs
PAREXEL’s unique approach to planning, execution management, and supplier monitoring provides significant cost savings along the supply chain, gets products to patients faster, identifies overspending budget risks upfront, and monitors each budget category centrally.

## Clinical Research Services: Clinical Logistics

**Simplifying End-to-End Global Clinical Logistics**

Clinical trial globalization creates significant logistical challenges. Effectively managing the clinical trial materials supply chain requires strategic oversight and up-to-the-minute tactical knowledge—plus a significant commitment of resources—to maintain reliable deliveries and avoid costly delays. Many organizations would benefit from a tight integration of supply chain information yet few are equipped to manage the increasing complexity of the trial materials supply chain.

PAREXEL can turn clinical complexity into clinical logistics intelligence. As your dedicated partner, PAREXEL ensures that logistical planning and execution is seamlessly integrated throughout the entire clinical trial life cycle to minimize disruptions and delays.

With strong support from PAREXEL, our clients and sites spend less time worrying about supplies and logistics, and are able to focus their attention on critical trial issues.