2013 Pain in The (Supply) Chain Survey

Global Pains Lead to Transformative Strategies

In this, the 6th annual UPS Pain in the (Supply) Chain survey, evidence emerges of a coming shift in the healthcare supply chain, as executives look to their supply chains to drive business change and meet business goals.

This study was conducted by TNS.
Introduction from UPS

PREPARING FOR HEALTHCARE SUPPLY CHAIN TRANSFORMATION

In the 6th annual UPS Pain in the (Supply) Chain survey, UPS sees emerging evidence of a coming shift in the healthcare supply chain. While most companies continue to grapple with all-too-familiar pain points in their supply chains, some are reporting the strategies they employed have brought about success. Meanwhile, the increasing complexity of healthcare products, the burdens of the regulatory environment and the promise of emerging markets are combining to generate not only new challenges but also opportunities to rethink the supply chain.

This year’s expanded survey reveals that while healthcare companies have been successful to varying degrees in addressing the industry’s most prevalent logistics challenges, strategies that ensure balanced success are elusive. New insights, however, show that those who have been most successful are increasingly leveraging logistics and distribution partnerships for expertise and support in areas such as new market access, supply chain optimization, regulatory compliance, IT, monitoring and intervention, and even shipment insurance. We see the trend toward partnership gaining momentum as healthcare logistics executives seek proven methods for optimizing their intricate, elongated supply chains.

While many healthcare manufacturers rely primarily on their own initiative and resources to manage their supply chains, it is becoming increasingly apparent that the industry leaders reporting the most significant and sustained supply chain improvements are leveraging global supply chain solution providers. This leaner model is less capital-intensive, freeing up resources and allowing companies to focus on their core life sciences competencies.

At UPS, our broad healthcare-optimized portfolio and unparalleled expertise offer healthcare manufacturers the opportunity to solve their logistics problems with a mix of solutions, in one place, with a single provider. Whatever the challenge, we have a solution. What’s more, we never forget: “It’s a Patient, not a Package.”

PLAY

SUPPLY CHAIN STRATEGIES FOR GROWTH

UPS Director of Global Strategy, Robin Hooker, introduces the UPS Pain in the (Supply) Chain Survey 2013.
Global Business Landscape

The global healthcare industry is embracing new growth opportunities while facing an increasingly complex regulatory and legislative environment. Economic and business challenges remain for companies around the world.

At the same time, companies are making large strides in their supply chain performance—setting the industry up for future investment, growth and change.

TOP BUSINESS PAIN POINTS FOR HEALTHCARE EXECUTIVES BY REGION

Percentage of healthcare logistics executives reporting pain points

North America
- Increasing regulations: 54%, 53%, 48%, 34%, 26%, 22%, 19%
- Patent expirations: 48%, 38%, 33%, 22%, 9%
- Intellectual property protection: 41%
- Industry consolidation: 41%

Western Europe
- Increasing regulations: 39%, 38%, 33%, 22%, 9%
- Patent expirations: 32%, 32%, 32%, 17%
- Access to capital/funding: 8%

Asia-Pacific
- Increasing regulations: 52%, 48%, 38%, 51%, 41%, 26%, 29%
- Patent expirations: 38%, 38%, 33%, 33%, 22%
- Access to capital/funding: 15%
Supply chain challenges differ around the world. In North America and Western Europe, regulatory compliance challenges top the list, but there are also very high concern levels around cost management in North America. In regions with developing markets, we see much greater concerns around product protection. For example, in Asia, product security and product spoilage are higher concerns than anywhere else.

**Global Supply Chain Landscape**

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**TOP SUPPLY CHAIN ISSUES BY REGION**

<table>
<thead>
<tr>
<th>U.S. &amp; CANADA</th>
<th>WESTERN EUROPE</th>
<th>ASIA-PACIFIC</th>
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</thead>
<tbody>
<tr>
<td>66% 45% 60% 38% 40% 17%</td>
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<td>70% 76% 57% 67% 48% 40%</td>
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- **Regulatory compliance**
- **Product damage or spoilage**
- **Product security**
- **Access to global markets or new customer bases**
- **Managing supply chain costs**
- **Changing distribution and go-to-market channels**

**Supply Chain Issues Around the Globe**

Robin Hooker reviews healthcare logistics executives’ global supply chain concerns.
Supply Chain Concerns

REGULATIONS, PRODUCT SECURITY AND COST MANAGEMENT AT THE FOREFRONT OF SUPPLY CHAIN CHALLENGES

Regulatory compliance, product security and cost management top the list of global supply chain concerns in 2013. For the first time, product security jumped ahead of cost management to become the second-top global supply chain pain point. Overall concern levels in 2013 are still high, but reflect a slightly less pessimistic view than in 2012. Concern levels around the top supply chain challenges are still significant.

THE RISE OF PRODUCT SECURITY CONCERN
Robin Hooker explains the key ways companies are addressing product security concerns.

PERCENTAGE OF LOGISTICS EXECUTIVES REPORTING SUCCESS IN ADDRESSING SUPPLY CHAIN ISSUES

Regulatory compliance 64%
Product security 59%
Product damage or spoilage 53%
Managing supply chain costs 44%
Access to global markets or new customer bases 37%
Changing distribution and go-to-market channels 31%

How successful has your company been in addressing supply chain issues in the past twelve months?
A CLOSER LOOK | Regulatory Compliance

COMPANIES ADDRESSING COMPLIANCE CHALLENGES WITH TECHNOLOGY, EXPANDED EXPERTISE AND PARTNERSHIPS

Companies are focusing on technology adoption, increasing regulatory expertise and partnerships with outside experts to overcome compliance challenges. While country regulations remain the top barrier to global expansion, three-quarters of healthcare executives are still planning to tap new global markets within the next five years.

SUCCESSFULLY SOLVING COMPLIANCE ISSUES

Robin Hooker examines strategies employed by companies making headway against compliance challenges.

COMPANIES EXPANDING DESPITE REGULATORY HURDLES

Top target markets for expanding companies

Despite regulatory hurdles, where will healthcare companies expand?

What are some of the strategies your company has utilized to successfully address regulatory compliance?

ISSUES

REGULATORY COMPLIANCE CHALLENGES

58%

Legislative outlook is murky, unstable or changing

57%

New market complexities

52%

Cost of managing multiple countries’ requirements

STRATEGIES

SUCCESSFULLY ADDRESSING COMPLIANCE CHALLENGES

IT investment: bar coding, serialization, e-pedigree

We increased our regulatory staffing levels and expertise

We hired regulatory consultants

Partnerships with local native distribution firms

Partnerships with large multinational distribution firms

49% 42% 41% 38% 32%

China United States Brazil India
A CLOSER LOOK | Product Protection

PARTNERSHIPS, TECHNOLOGY SOLUTIONS PROMOTE PRODUCT PROTECTION

Today, supply chains are longer and products are more high-value and complex than ever, making product protection paramount to success. This year, product protection has surpassed costs as a top concern for the first time. As product protection challenges grow in intricacy, many logistics executives are insuring shipments with trusted partners and also investing in technology solutions.

**ISSUES**

- Counterfeiter sophistication is growing faster than our countermeasures
- Poor supply chain visibility and too many supply chain hand-offs
- Inadequate law enforcement response
- Gray market or parallel trade
- Under-regulated wholesalers and repackagers
- IT and bar coding solutions have not solved the counterfeiting issue
- Proliferation of illegal online pharmacies creating a retail demand fulfillment channel

**PRODUCT SECURITY CHALLENGES**

- Counterfeiter sophistication is growing faster than our countermeasures: 48%
- Poor supply chain visibility and too many supply chain hand-offs: 40%
- Inadequate law enforcement response: 37%
- Gray market or parallel trade: 33%
- Under-regulated wholesalers and repackagers: 30%
- IT and bar coding solutions have not solved the counterfeiting issue: 28%
- Proliferation of illegal online pharmacies creating a retail demand fulfillment channel: 9%

**STRATEGIES**

**SUCCESSFUL STRATEGIES FOR PRODUCT SECURITY**

- Shipment insurance: 61%
- Visible authentication: holographs, security inks, etc.: 47%
- IT investment: bar coding, serialization, chain of custody, e-pedigree: 56%
- Law enforcement response: 37%
- Covert and forensic authentication: invisible fluorescent inks, taggants, micro images or text: 19%

What are your challenges around product security?

What are some of the strategies your company has utilized to successfully address product security?
A CLOSER LOOK | Managing Costs

PARTNERSHIPS AND INFORMATION TECHNOLOGY HELP LEAD TO SUCCESSFUL COST MANAGEMENT

Healthcare supply chain professionals are focused on logistics and distribution partnerships, technology investment and supply chain optimization as the top three strategies to successfully manage costs. In 2013, shipping and labor costs and more-complex supply chains are the top cost management challenges.
Future Strategies

**NEW DISTRIBUTION MODELS, ALONG WITH TECHNOLOGY INVESTMENTS AND GLOBAL EXPANSION TOP UPCOMING STRATEGIES FOR SUCCESS**

The top three growth strategies for healthcare executives over the next five years are technology investment, global market expansion and increased use of new distribution channels—with significant jumps in the number of executives employing these strategies.

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**Expected distribution methods in the next 18 months**

- **10%** Direct shipments to patients
- **35%** Direct shipments to providers and retailers
- **55%** Wholesalers/distributors

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**STRATEGIES TO IMPROVE COMPETITIVENESS AND INCREASE EFFICIENCY**

- Invested in new technologies: 74% now, 84% over the next 5 years
- Tapped new global markets to expand our customer base: 67% now, 78% over the next 5 years
- Worked with/increased reliance on a third-party logistics provider: 59% now, 59% over the next 5 years
- Increased use of new distribution channels/models: 53% now, 70% over the next 5 years
- Curbed expansion and focused on top growth markets: 51% now, 50% over the next 5 years
- Consolidated/reduced the number of suppliers globally: 51% now, 56% over the next 5 years
- Increased amount of outsourcing: 38% now, 41% over the next 5 years

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**STRATEGIES NOW**

Which of the following strategies have you employed over the last 18 months to increase efficiencies and/or improve your competitiveness?

**STRATEGIES OVER NEXT 5 YEARS**

Which of the following strategies do you plan to employ over the next three to five years to increase efficiencies and/or improve your competitiveness?
Common Themes

COMMON SOLUTIONS EMERGE: ENHANCING EXPERTISE AND NEW TECHNOLOGY

In all three top supply chain concerns (regulatory compliance, product protection and managing costs), two themes surface as supply chain best practices: accumulating expertise and using best-in-class technologies.

Logistics professionals are ensuring they have the supply chain and regulatory expertise—whether developing resources internally, or using an external partner—to conquer these challenges.

Order management and web ordering technology will continue to lead as the top IT investments, but healthcare logistics executives also plan to invest significantly more in temperature-sensitive, security-specific, and e-pedigree and serialization technologies over the next five years.
North America Close-up

COST MANAGEMENT, REGULATIONS ARE TOP CONCERNS; SUCCESSFUL STRATEGIES EMERGE IN NORTH AMERICA

Meeting the demands of regulatory compliance is the top concern for two-thirds of healthcare logistics decision makers. Additionally 60% of survey participants signaled managing supply chain costs as another concern. Executives have made strides to address those challenges: 56% have seen success from logistics and distribution partnerships, 49% have improved cost management through bar coding, serialization or e-pedigree technologies and 44% have benefited from a supply chain optimization analysis.

When thinking about possible barriers to global expansion, please indicate the extent to which each of the following is a barrier.

Country regulations: 59%
Product quality concerns: 36%
Intellectual property protection: 39%
Product security: 29%
Limited infrastructure: 18%
Managing global suppliers: 23%
Managing multiple logistics providers: 18%

TOP SUPPLY CHAIN ISSUES FOR NORTH AMERICA

66% 60% 45% 40% 38% 17%
Regulatory compliance
Access to global markets or new customer bases
Managing supply chain costs
Product damage or spoilage
Product security
Changing distribution and go-to-market channels

When thinking about possible barriers to global expansion, please indicate the extent to which each of the following is a barrier.
Asia Close-up

PRODUCT PROTECTION CONCERNS LEAD TO TECHNOLOGY INVESTMENTS IN ASIA

Product protection, which includes both the security of high-value shipments and product spoilage, is a top concern for healthcare supply chain executives in Asia—almost double that of logistics executives in Western Europe and North America.

Factors such as the geographically dispersed nature of the region and infrastructure challenges in developing markets are likely driving up concern levels. To address these challenges, executives in Asia are primarily focused on investing in technology.

67%
Report product damage and spoilage as a top concern, almost double that of North America and Western Europe at 38% and 34%, respectively.

76%
Healthcare logistics executives in Asia are concerned about product security—significantly more than their peers elsewhere.

71%
Plan to invest in e-pedigree or serialization technologies

68%
Plan to invest in security-specific technologies

61%
Plan to invest in temperature-sensitive technologies

Temperature-sensitive technology investment specifically will see a significant jump from 43% having invested in it in the past 18 months to 61% planning to invest over the next 3-5 years.
Western Europe Close-up

AMID ECONOMIC IMPACTS, EUROPEANS EYE EXPANSION AND NEW CHANNEL STRATEGIES

As economic struggles continue in Western Europe, supply chain executives there are less optimistic about the economy than their peers in other parts of the world, with nearly half reporting that they are still feeling the impacts. Despite these challenges, logistics leaders in the region are planning to increase supply chain investments over the next few years to ramp up efficiencies and competitiveness.

NEW DISTRIBUTION CHANNEL STRATEGIES

OVER THE NEXT FIVE YEARS, 64% of executives in Western Europe plan to increase their use of new distribution channels, versus 47% of those who have already done so in the past 18 months.

PAST 18 MONTHS

47%

NEXT 5 YEARS

64%

Healthcare executives in Europe will invest much more heavily over the next 5 years in serialization or e-pedigree technology, with 60% planning to invest in these areas.

GLOBAL MARKET EXPANSION A TOP PLAN FOR EUROPE DESPITE ECONOMIC STRUGGLES

74%

When considering plans over the next 3 to 5 years, 74% of logistics decision-makers in Western Europe plan to invest in global market expansion.

40%

Healthcare executives say they plan to invest in security-related technology over the next 5 years, up from just 28% who have invested in those technologies over the past 18 months.
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Supply Chain Concerns

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THE RISE OF PRODUCT SECURITY CONCERNS
Robin Hooker explains the key ways companies are addressing product security concerns.

Rate the following supply chain issues which may or may not impact your business in the future.

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<thead>
<tr>
<th>Issue</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>Regulatory compliance</td>
<td>65%</td>
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PERCENTAGE OF LOGISTICS EXECUTIVES REPORTING SUCCESS IN ADDRESSING SUPPLY CHAIN ISSUES

- Regulatory compliance: 64%
- Product security: 59%
- Product damage or spoilage: 53%
- Access to global markets or new customer bases: 37%
A CLOSER LOOK | Regulatory Compliance

COMPANIES ADDRESSING COMPLIANCE CHALLENGES WITH TECHNOLOGY, EXPANDED EXPERTISE AND PARTNERSHIPS

Companies are focusing on technology adoption, increasing regulatory expertise and partnerships with outside experts to overcome compliance challenges. While country regulations remain the top barrier to global expansion, three-quarters of healthcare executives are still planning to tap new global markets within the next five years.

SUCCESSFULLY SOLVING COMPLIANCE ISSUES

- IT investment: bar coding, serialization, e-pedigree
- We increased our regulatory staffing levels and expertise
- We hired regulatory consultants
- Partnerships with local native distribution firms
- Partnerships with large multinational distribution firms

What are your biggest challenges with regulatory compliance?

- Legislative outlook is murky, unstable or changing: 58%
- New market complexities: 57%
- Cost of managing multiple countries' requirements: 52%

What are some of the strategies your company has utilized to successfully address regulatory compliance?

- Despite regulatory hurdles, where will healthcare companies expand?

- China: 49%
- United States: 42%
- Brazil: 41%
- India: 38%
- Asia-Pacific: 32%
- Europe: 27%
- United Kingdom: 21%
- United States: 18%
- India: 13%
- China: 12%

BACK TO SUMMARY
A CLOSER LOOK | Product Protection

PARTNERSHIPS, TECHNOLOGY SOLUTIONS PROMOTE PRODUCT PROTECTION

Today, supply chains are longer and products are more high-value and complex than ever, making product protection paramount to success. This year, product protection has surpassed costs as a top concern for the first time. As product protection challenges grow in intricacy, many logistics executives are insuring shipments with trusted partners and also investing in technology solutions.

What are your challenges around product security?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
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<tr>
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What strategies your company has utilized to successfully address product security?

- Shipment insurance
- IT investment: bar coding, serialization, chain of custody, e-pedigree
- Enhanced in-transit monitoring and intervention
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Western Europe Close-up

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NEXT 5 YEARS

PAST 18 MONTHS

Healthcare executives in Europe will invest much more heavily over the next 5 years in serialization or e-pedigree technology, with 60% planning to invest, up from just 28% who have invested in these technologies over the past 18 months.

DISTRIBUTION MODELS CHANGING

Dan Gagnon, director of healthcare marketing and strategy, UPS Europe, discusses supply chain changes and innovations.

MARKET EXPANSION A TOP PLAN FOR EUROPE DESPITE ECONOMIC STRUGGLES

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