Embracing Risk:
It’s Time to Capitalize on Untapped Opportunities

The Seventh Annual Pain in the (Supply) Chain Survey

The study was conducted by TNS in January and February 2014.
Embracing Risk: It's Time to Capitalize on Untapped Opportunities

The healthcare industry is at a critical juncture. The global population is growing and the median age is rising. Growth of the middle class in emerging markets is surging. The demand for healthcare services has never been greater, and the entire world is a marketplace.

Companies should be moving fast to make strategic changes to their supply chains so that they can capitalize on new opportunities. But supply chain change is slow.

The seventh annual UPS Pain in the (Supply) Chain survey reveals that a risk-inherent environment may be impeding growth in the healthcare industry.

On the other hand, some logistics leaders are already reacting to emerging opportunities by transforming their supply chains. They are forming strategic partnerships to overcome challenges, such as complying with regulations, managing costs, and accessing global markets.

They’re also planning for significant technology investments to enable order flexibility and visibility, and to better protect products moving through elongated supply chains.

The winners in tomorrow’s healthcare marketplace will be the companies that have created agile, efficient, and flexible supply chains. Now is the time for companies to take action, to make the strategic supply chain changes that will allow them to capitalize on untapped opportunities.

*Not* acting could be the greatest risk of all.
Key findings at a glance
Pains, gains, and possibilities from the seventh annual survey

State of the Industry & Challenges:

- **Economic conditions** still weigh on healthcare companies, including those in Western Europe.

- **Cost management**, driven by regulatory reform and profit pressures, remains a top supply chain issue. Yet the level of concern is declining year over year.

- **Regulatory compliance** remains the top business and supply chain issue. A murky legislative outlook and differing regulations by country, especially in Western Europe, make the issue more complex.

- **Product protection**, which comprises both product integrity and product security, has become a bigger challenge as products become more complex and companies expand into emerging markets. Concerns are particularly high in Asia-Pacific.

- **Contingency planning** is an area in which fewer than four in ten executives report success. Supply chain disruptions have had the greatest supply chain impacts in Asia-Pacific and Latin America.

Strategies & Untapped Opportunities:

- **Collaboration and partnerships** are top strategies to address challenges, such as complying with regulations, supply chain cost management, and global market access.

- **Technology investment** is the top strategy to improve competitiveness and efficiency. Planned technology investments enable better product protection, visibility, and easier patient access through online ordering.

- **Growth and global expansion** challenges include a complicated regulatory environment and inadequate infrastructure in emerging markets. Companies are leveraging partnerships to get ahead.

- **New channel and distribution strategies** bring new opportunities for companies—particularly with anticipated growth in home healthcare. Yet shifts in channel mixes are slow to materialize.
State of the Healthcare Industry:
How economic and industry trends are influencing global healthcare companies' business operations and supply chains

- Global economic conditions
- Trends driving change
- Cost management concerns
State of the Healthcare Industry: Global economic conditions

Economic outlook is brighter, but recession still casts a shadow

While improving overall, economic conditions still weigh on healthcare companies worldwide. Supply chain decision makers continue to feel the effect of the global recession in terms of tightened spending and other reductions or cutbacks.

Executives still feel the impact of the recent economic downturn

- **Western Europe**: 49% Still feeling the impact, 8% Impacts have lessened, 4% Not sure
- **Latin America**: 54% Still feeling the impact, 8% Impacts have lessened, 4% Not sure
- **Asia-Pacific**: 46% Still feeling the impact, 8% Impacts have lessened, 4% Not sure
- **North America**: 54% Still feeling the impact, 8% Impacts have lessened, 4% Not sure

How is the recent economic downturn still impacting your company in terms of tightening spending and other reductions/cutbacks?
State of the Healthcare Industry:
Trends driving change

From regulations to reimbursement, emerging challenges drive industry change

Healthcare executives are preparing for change in their businesses and supply chains in response to multiple pressures. Logistics executives are investing, primarily in technology, to counter these challenges.

Trends impacting healthcare companies’ businesses and supply chains:
- Changing or increasing regulatory requirements
- Increasing product development specialization
- Changing reimbursement levels

Top supply chain concerns reported by healthcare executives:
- Regulatory compliance
- Product security
- Supply chain cost management
- Product damage or spoilage

Global trends most driving change in business and supply chains:
- 37% Changing/increasing regulatory requirements
- 24% Product development specialization
- 12% Reimbursement levels
- 9% Patient demographics
- 8% Don’t know/Didn’t answer
- 5% Shift to home healthcare
- 5% Serialization
- 5% Serialization

Survey participants cited the following supply chain issues as concerns:

- Regulatory compliance: Western Europe 55%, Global 60%
- Managing supply chain costs: Western Europe 41%, Global 44%
- Product security: Western Europe 41%, Global 46%
- Product damage or spoilage: Western Europe 30%, Global 40%
- Access to global markets or new customer bases: Western Europe 28%, Global 28%
- Changing distribution and go-to-market channels: Western Europe 17%, Global 21%

Please rate the following supply chain issues which may or may not impact your business in the future.
State of the Healthcare Industry: Cost management concerns

Coping with cost pressures: Partnerships can ease the pain

The pressure to contain costs is a constant in the healthcare industry. New regulations, changing reimbursement models, and profit pressures are likely reasons cost management continues to be a top supply chain issue. Cost management concerns, however, have declined year over year.

Lower concern levels could be partially associated with healthcare executives’ weary acceptance that the cost containment challenge is likely here to stay. On the other hand, less concern may indicate executives are finding innovative ways to address cost management in their supply chains.

Internally, companies are ramping up technology investments. Externally, they are relying more on partnerships with logistics and distribution providers, and also outsourcing transportation management.

Top strategies to manage supply chain costs

Percentage of supply chain executives globally reporting use of the following strategies to contain costs:

- Logistics and distribution partnerships: 78%
- IT investment: 66%
- Outsourced transportation management: 62%

What are some of the strategies your company has utilized to successfully manage supply chain costs?

Although still a top issue globally, concern over cost management is slowly decreasing

Percentage of healthcare supply chain leaders concerned about cost management, 2011-2014:

- 2011: 64%
- 2012: 60%
- 2013: 51%
- 2014: 44%

Please rate the following supply chain issues which may or may not impact your business in the future. (Only cost management data shown.)
Challenges:
Challenges left unaddressed may hamper growth

- Regulatory environment
- Product protection
- Contingency planning and disruption preparedness
Challenges:
Regulatory environment

It’s complicated: Navigating complex regulations can be a high-stakes operation

Complying with regulatory requirements is often difficult. The rules have changed—and keep changing. Consequently, regulatory compliance is again the top business and supply chain issue for healthcare supply chain leaders. In Europe, this is particularly important with the upcoming Falsified Medicines Directive and the revised Good Distribution Practices (GDP) guidelines, both of which require increased supply chain management and documentation processes.

Some healthcare executives are seeing success in addressing the challenges of regulatory requirements through partnerships that bring regulatory expertise. This is an underutilized strategy, and one that could deliver significant benefits if embraced more broadly.

Global challenges to regulatory compliance:

- Legislative outlook that is murky, unstable, or changing: 75%
- Delays caused by lack of clarity in regulations: 69%
- Keeping up with new regulations: 62%
- Higher cost of managing multiple countries’ regulatory requirements: 54%
- New market complexities: 53%

You indicated your company has been less effective in addressing areas related to regulatory compliance. What are your biggest challenges?
Challenges:
Product protection

Longer chains, stronger concerns

In addition to regulations, product integrity and product security (collectively referred to in this report as "product protection") are top issues.

Concern about in-transit protection grows as products become more complex, often requiring temperature-sensitive transportation. As products travel further to new markets, the number of hand-offs increases, and supply chain visibility becomes even more important.

Among all supply chain executives, more in Asia-Pacific expressed concern about product damage and spoilage than in other regions.

Top global challenges to product security

<table>
<thead>
<tr>
<th>Challenge</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterfeiter sophistication growing faster than countermeasures</td>
<td>48%</td>
</tr>
<tr>
<td>Poor supply chain visibility and too many supply chain hand-offs</td>
<td>40%</td>
</tr>
<tr>
<td>Inadequate law enforcement response</td>
<td>35%</td>
</tr>
</tbody>
</table>

Top global challenges to product damage and spoilage

<table>
<thead>
<tr>
<th>Challenge</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse weather/temperature environment</td>
<td>69%</td>
</tr>
<tr>
<td>Carrier service delays/damage</td>
<td>69%</td>
</tr>
<tr>
<td>Customs brokerage delays</td>
<td>46%</td>
</tr>
<tr>
<td>Increasing number of temperature-sensitive product shipments</td>
<td>44%</td>
</tr>
</tbody>
</table>

You indicated (your) company (has) been less effective in addressing areas related to product security. In that respect, what are your biggest challenges?

You indicated your company (has) been less effective in addressing areas related to product damage or spoilage. In that respect, what are your biggest challenges?
The survey reveals a perception among supply chain executives that disruptive events are rare. Globally, only 26 percent of respondents cited supply chain interruption as a top concern. In the past five years, however, unexpected events have had a measurable effect on healthcare supply chains, particularly in Asia-Pacific and Latin America. The extent of the impact may partially be explained by the finding that fewer than four in ten respondents could report success in contingency planning.

Disruptions, of course, need not mean dramatic natural disasters: A simple power outage can bring business operations to a halt. A greater focus on contingency planning is required within the industry.

**Challenges:** Contingency planning and disruption preparedness

It will never happen to you...until it happens to you

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Disruptions, of course, need not mean dramatic natural disasters: A simple power outage can bring business operations to a halt. A greater focus on contingency planning is required within the industry.

**Impact of disruptive events on supply chains in the past three to five years**

Percentage of executives reporting that more than 25% of supply chain has been affected

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>5%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>34%</td>
</tr>
<tr>
<td>Latin America</td>
<td>22%</td>
</tr>
<tr>
<td>North America</td>
<td>10%</td>
</tr>
</tbody>
</table>

Thinking about unplanned events (such as a natural disaster, political event, or civilian unrest) in the last three to five years, what percentage of your supply chain has been impacted?

**A cool solution when disruption hits**

Fast-growing Shire Regenerative Medicine (SRM) of La Jolla, California, recognized that maintaining the company’s entire stock of product at a single location presented a potentially significant business continuity risk. The company consulted UPS, and chose to set up a secondary cryogenic storage and distribution facility at a UPS healthcare-dedicated facility in Louisville, Kentucky.

The company avoided disaster when a widespread power outage shut down the San Diego airport, and brought the city to a halt. But delivery of its living skin-cell product was maintained when the Louisville operation swung into action, fulfilling the company’s vital orders from 1,800 miles away, protecting both the company and its patients.

“We spent a lot of time analyzing who we wanted to partner with,” explains SRM Logistics Manager, Mike Whitmore. “And we determined that UPS had the advantage in understanding the healthcare business and distributing to the healthcare market.”

Whitmore says he sleeps better at night knowing that his company has backup plans in place and—as a logistics expert who has now been called upon to activate his contingency plans—he knows the value of planning as well as anyone.

He puts it plainly: “We’d have been out of business if we’d not been able to ship that day.”
Successful Strategies:
Strategies are emerging to address a range of business and supply chain challenges

- Collaboration and partnerships
- Technology investment
Successful strategies:
Collaboration and partnerships

Do what you do best: Partnerships may permit greater focus on profitable core competencies

Healthcare companies have been slower than those in other industries to outsource their supply chains. That picture, however, is now changing. Likely reasons for the shift include globalization, industry cost pressures, the increasing need for expertise in areas such as regulatory compliance and product protection, and expansion into new markets.

Companies that embrace collaboration may be able to focus more on their core competencies, freeing up time and resources to pursue product development, marketing, and sales.

The trend towards collaboration*

Strategies successfully used globally to manage top supply chain challenges:

<table>
<thead>
<tr>
<th>Regulatory compliance</th>
<th>Supply chain cost management</th>
<th>Accessing global markets and new customer bases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hired regulatory consultants</td>
<td>Used logistics and distribution partnerships</td>
<td>Used logistics and distribution partnerships</td>
</tr>
<tr>
<td>57%</td>
<td>78%</td>
<td>63%</td>
</tr>
<tr>
<td>41%</td>
<td>56%</td>
<td>54%</td>
</tr>
<tr>
<td>Built partnerships with local native distribution firms</td>
<td>Outsourced transportation management</td>
<td>Built partnerships with local native distributors</td>
</tr>
<tr>
<td>54%</td>
<td>62%</td>
<td>60%</td>
</tr>
<tr>
<td>38%</td>
<td>42%</td>
<td>46%</td>
</tr>
<tr>
<td>Built partnerships with large multinational distribution firms</td>
<td>Vested logistics and distribution partnerships</td>
<td></td>
</tr>
<tr>
<td>38%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>32%</td>
<td>45%</td>
<td></td>
</tr>
</tbody>
</table>

*Data extracted from questions with multiple-choice answers. Not all answer options are shown here.
Successful strategies:
Technology investment

Technology is changing healthcare supply chains. Are you connected?

Strategic technology investments may be winning strategies in healthcare.

Two common themes emerged when survey respondents were asked about specific planned technology investments:

- **Front-end technology:** Planned investments, such as order management and online ordering systems, reflect the need for manufacturers to pay attention to technology’s role at the front end of their operations. A tight focus on this part of the supply chain will provide greater order visibility globally and provide customers with greater flexibility.

- **Product protection:** Planned investments illustrate a focus on ensuring product integrity as well as addressing product security concerns.

Continued investment in technology will be critical to building global supply chains that serve more customers, more efficiently.

Percentage of respondents in Western Europe citing planned technology investments by type in the next three to five years:

- 69% Order management systems
- 57% Serialization and/or track-and-trace technologies
- 55% Online ordering systems
- 49% Cold chain/temperature-sensitive technologies
- 34% Security technologies for high-value and/or high-risk shipments

Which specific technologies would you invest in to increase efficiencies and/or improve your competitiveness over the next three to five years?
Opportunities:
From planning table to point of care, growth opportunities abound

- Growth and global expansion
- New channel and distribution strategies
Opportunities: Growth and global expansion

Worldly advice: global expansion challenges and successful strategies revealed

The complicated regulatory environment and still-developing transportation infrastructure in some developing markets are slowing expansion for many companies. Also, the large number of markets emerging simultaneously may make the development of a growth strategy a complex undertaking.

Healthcare executives whose companies have successfully accessed new global markets have employed an array of strategies, including constructing their own facilities in new markets and engaging in distribution partnerships.

The top markets targeted for expansion by executives around the world are China, the United States, Brazil, and India.

Executive’s worldwide approach to new horizons

Top markets targeted for expansion

- China: 28%
- U.S.: 20%
- Brazil: 20%
- India: 14%

Successful strategies for global expansion

- Built new infrastructure overseas: 70%
- Used logistics and distribution partnerships: 65%
- Built partnerships with local distributors abroad: 60%

Top challenges to global expansion

- Complicated regulatory environment: 66%
- Inadequate infrastructure in emerging markets: 62%
- Simultaneous multiple emerging markets complicate strategy: 57%

What are some of the strategies your company has utilized to successfully access global markets to reach new customer bases?

What are the six priority markets your company is planning to expand to, or will increase focus on, in the next 18 months?

You indicated your company (has) been less effective in reaching new customer bases in global markets. What are your biggest challenges?
Opportunities: New channel and distribution strategies

Patient-centric models are “in”

Seeking ways to deliver better service at a lower cost, while also meeting the demands of the increasingly engaged and informed patient, the healthcare industry has created many decentralized care options, including home healthcare.

According to executives surveyed worldwide, 30 percent of their products will support the home healthcare channel in the next seven to ten years. Yet shifts in supply chain channels are slow to materialize, with many companies still developing their direct channel strategies.

Healthcare executives who have been successful in implementing new distribution channels once again this year cite collaboration with logistics and distribution partners. Also, executives are making technology investments to improve the breadth of their capabilities.

Challenges and successful strategies

Among executives indicating they were less effective in addressing concerns relating to changing distribution channels...

68% surveyed worldwide say it is because they are continuing to build their direct channel strategies.

You indicated your company has been less effective in addressing areas related to changing distribution and go-to-market channels. What are your biggest challenges?

When asked about successful strategies for implementing new distribution channels and models...

61% surveyed globally cited collaboration with logistics and distribution partners and/or IT investment.

What are some of the strategies your company has utilized to successfully address changing distribution and go-to-market channels?
Western Europe
Focus:
A closer look at industry direction in the region

- Trends
- Regulations and expertise
Western Europe Focus: Trends

Healthcare supply chains slow to deliver change

Survey findings reveal a healthcare industry that continues to move slowly to meet evolving challenges and emerging opportunities.

It’s not surprising that regulatory compliance continues to top the challenges list in Western Europe given the requirements of the Falsified Medicines Directive and controls on all pharmaceutical products—not just those that are temperature sensitive.

The industry is also preparing for the amended Good Distribution Practice (GDP) guidelines, requiring increased supply chain quality management and documentation practices by 2015.

Home healthcare is a trend that’s picking up an expanding pace in the United Kingdom. In the rest of Europe, although countries, such as Germany, are beginning to see growth in home healthcare, most have been a bit slower to embrace the shift.
Western Europe Focus: Regulations and expertise

Smart move: Increasing expertise is top strategy to help counter regulatory complexity

While the effects of the global recession are lessening from the vantage point of logistics executives in Western Europe, other challenges are growing. The regulatory environment is complex in Europe, where different requirements among countries—even those in close proximity to one another—make it difficult to stay on top of regulatory demands. Regulations also create a potential barrier to creating new distribution models, or extending them into other countries.

Among the strategies to address supply chain challenges cited by executives in Western Europe, an average of 56 percent of respondents outsource aspects of their supply chains, compared to an average of only 30 percent last year.

### The recession and regulations

<table>
<thead>
<tr>
<th>Percentage of executives still feeling the impacts of the economic downturn</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td></td>
<td>47%</td>
<td>43%</td>
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<table>
<thead>
<tr>
<th>Percentage of executives citing regulatory compliance as the top supply chain issue</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td></td>
<td>57%</td>
<td>55%</td>
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</table>

<table>
<thead>
<tr>
<th>Percentage of executives addressing regulatory compliance issues by increasing regulatory staffing levels and expertise</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52%</td>
<td>80%</td>
</tr>
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</table>

How is the economic downturn still impacting your company in terms of tightening spending and other reductions/cutbacks?

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

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

Globally and locally, big changes are affecting healthcare delivery—and they are here to stay. What's more, these changes present unique logistics challenges.

The top supply chain concerns—regulatory compliance, product security, managing supply chain costs, and product damage and spoilage—are for the most part being addressed successfully through collaboration and partnerships, investment in IT, and/or investment in building in-house expertise.

There are challenges, however, that many companies have been slower to tackle, often because of risk associated with making changes to supply chains.

Logistics executives report, for example, they have had least success in addressing supply chain costs. Yet achieving the next level of business growth almost inevitably requires implementing change. Consequently, many say they are turning to logistics and distribution partnerships to overcome this challenge.

The greatest risk of all, however, may be one that isn't obvious: simply waiting too long to capitalize on the untapped opportunities in healthcare.

Hesitation may come with a price. Decisive action is needed to get ahead.

Take Action: Four steps to a supply chain that will deliver success

1. **Assess** the opportunities you haven't yet capitalized on, and set your goals.
2. **Consult** experts to determine the supply chain you will need to achieve success (and plan for the unexpected, too).
3. **Create** a supply chain that is agile, efficient, and can expand as you grow.
4. **Move quickly** to capture opportunities in new markets—your closest competitors are likely doing the same.