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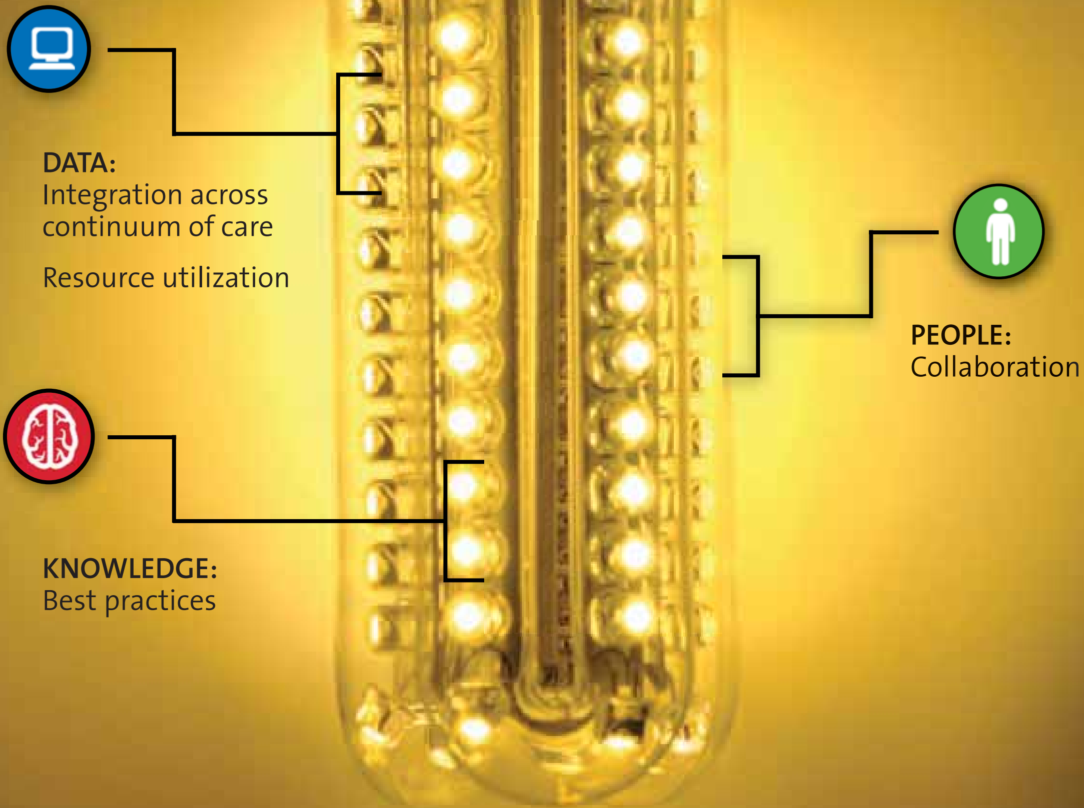
>>> PROVIDING STRATEGIC LEADERSHIP TO FINANCIAL AND CLINICAL HEALTHCARE EXECUTIVES

FALL • 2012 • A TWELVE MONTH OUTLOOK



THE FUTURE OF THE HEALTHCARE SUPPLY CHAIN

CONNECTING DATA + KNOWLEDGE + PEOPLE

INTEGRATING ACROSS THE SUPPLY CHAIN
An interview with IBM

PUSHING THE HEALTHCARE INDUSTRY TOWARD SUSTAINABILITY

DEMAND DRIVEN PURCHASING IN HEALTHCARE:
Realignment of buyers and sellers?

The healthcare supply chain: Pushing the healthcare industry toward sustainability

In the summer of 2012, Premier surveyed more than 13,000 healthcare leaders across our membership, representing both the acute and non-acute healthcare markets. The majority of respondents (72 percent) are C-Suite, supply chain or materials management, or service line or practice area managers/directors.

The purpose of our member survey was to gauge the key external and internal challenges healthcare leaders face, what supply chain efforts they're focusing on to meet those challenges, and which efforts are most critical to their near- and long-term financial stability and success.

What follows is a look at the healthcare supply chain through the eyes of more than 600 executives who responded to our survey, coupled with insights from interviews with supply chain experts.

Introduction

The healthcare supply chain, like the industry it serves, is undergoing massive changes under the specter of unprecedented government reform. Amidst this pressure, there are countless stories showing how healthcare supply chain innovation has become a means to achieve successes far beyond products, cost reduction and improved efficiency. In fact, supply chain innovation is beginning to help hospitals improve their core business of improving the health of patients, a point not lost among the other major part of the supply chain–suppliers.

"Key is linking suppliers to patient needs and outcomes," says David Wohler, vice president, Global Sourcing, Covidien, Mansfield, MA, which recently implemented a supplier stratification model centered on linking suppliers to patient needs and outcomes. Through the program, Covidien is focusing on more strategic relationships with fewer suppliers, "really recognizing those who have stressed innovation to ensure they know they're a key part of our success," he adds. "But the ultimate goal is to transform their views to be less about resins or molding or packages and more about patient needs and expectations."

Connecting data and people, as Wohler mentions, is a major opportunity for supply chain stakeholders to excel in a time of change. The supply chain's ability to take this opportunity and create efficiencies, connect data with patient outcomes and improve processes is also a leading influence on the future of healthcare.

Through its member collaboratives, Premier has identified key metrics for supply chain excellence that serve to benchmark processes against peers to reduce costs and improve outcomes. The vast majority of survey respondents (80 percent) believe their organization has had some success in achieving supply chain excellence, with 62 percent of respondents stating that their supply chain gives them differentiated value and thus, a competitive advantage in the marketplace (Figure 1).

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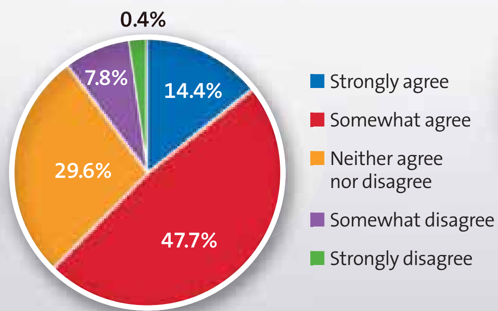
Figure 1 | **Supply chain offers a competitive advantage in the marketplace**



Source: Premier online survey for Economic Outlook Fall 2012 publication

Major supply chain trends

Still, there are key barriers and challenges to overcome in achieving supply chain success. In spite of remarkable progress at hundreds of hospitals and health systems across the country, the healthcare supply chain as a whole lags behind those of other sectors in efficiency.

Researchers who explored highly innovative practices at two prominent health systems, for example, declared that Medicare hospital spending could be reduced by up to 43 percent—while still maintaining or improving quality of care—if all providers achieved the same level of efficiency for inpatient spending on supply-sensitive care.[1] Those researchers based their conclusion on methods both organizations used to achieve among the industry's best outcomes and highest quality for the lowest utilization and cost.

Another supply chain dilemma is waste, particularly in the form of overutilization of products or unnecessarily high supply expenses. Association for Healthcare Resource and Materials Management experts assert that supply costs have escalated year after year and today account for more than one-third of a hospital's expenses on a per case basis. The only thing more costly is labor.[2]

Top barrier: Product utilization

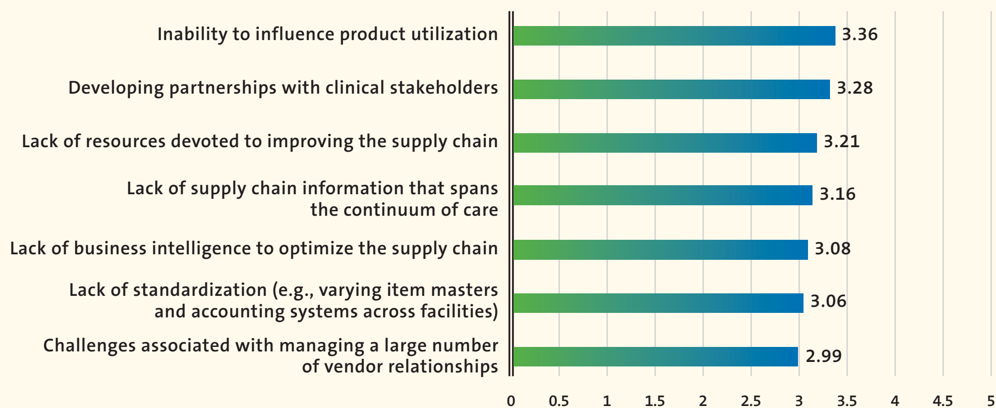
The biggest barrier to achieving supply chain excellence, according to respondents, is an inability to influence product utilization, followed closed by developing partnerships with internal clinical stakeholders (Figure 2). However, the percentage of respondents indicating these as top barriers continues to decrease from previous surveys, demonstrating that the supply chain is becoming more visible to clinicians and is more often influencing clinical decisions. Of seven listed barriers, the majority of respondents (69 percent) state that two or more of the seven barriers are applicable to them. Nearly half of those achieving the highest degree of success in supply chain excellence, however, report facing either none or only one barrier.

James P. O'Connor, vice president, Supply Chain Management, Henry Ford Health System, Detroit, MI, believes product utilization "represents the final frontier for supply chain."

O'Connor believes opportunities abound, and for that reason, he's focusing utilization efforts on physician preference items and high-cost products. For example, O'Connor has led a successful strategic sourcing initiative in cardiac rhythm management that has trimmed millions in product costs. That initiative also is crossing disciplines.

"We're working with cardiology, interventional radiology and vascular surgery together on sourcing products of a similar nature," he says. "Without this initiative, we probably wouldn't have the vascular surgeons talking with the cardiologists talking with the interventional radiologists. Incredible learning is going on as a result of that dialogue. We're not clinicians, but we are facilitating the process that allows for that kind of collaboration. Their learning and sharing experiences with one another is now helping to drive product decisions."

Figure 2 | Barriers to supply chain excellence



Data above represent mean across all responses; 1=Not a barrier at all; 5=Significant barrier
Source: Premier online survey for Economic Outlook Fall 2012 publication

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maintaining positive and strong margins and a healthy bottom line allows us to invest money in leading-edge technologies," he says. "But these academies also allow us to educate our physicians on healthcare reform and the financial models relative to our payors under a healthcare reform world, so they can understand how reimbursement works."

How successful has Davis been? "I have to admit I'm feeling very confident when I start getting phone calls at home on the weekends from physicians telling me they were approached by a vendor, and they want to know what my thoughts are," he says. "That's a good sign. It never happened before but it does now."

Among seven potential barriers to achieving supply chain excellence, the challenges associated with managing a large number of vendor relationships came in last (Figure2).

Michael McCarry, RN, senior vice president, perioperative services, The Mount Sinai Hospital, New York City, NY, like many involved in frontline vendor relationships today, has been successful in educating vendors about his need to bring costs down. "I tell vendors that I have as much right to save money as they do to make money," he says. And that message is not lost on internal stakeholders. "A lot of our value analysis is based on what product or device a clinician wants to bring in, what will it do, why should I believe it, what is the pricing," he adds. "Healthcare reform has changed the game – cost containment and justification take on greater significance. It requires more buy-in and active participation from the surgical departments and their staff, in justifying expenses in relation to outcomes."

"Product utilization has the biggest bang in the physician area."

Kevin Davis, system vice president, Supply Chain Services, Sharp HealthCare (San Diego, CA)

Using Henry Ford Health System and Premier data, O'Connor is able to track neurosurgery utilization variation by product. And each month, his office produces a report that benchmarks each institution in the Henry Ford system and sends it to relevant senior leaders within surgery lines.

Kevin Davis, system vice president, Supply Chain Services, Sharp HealthCare, San Diego, CA, addresses the product utilization issue where he believes he has the biggest bang: physicians.

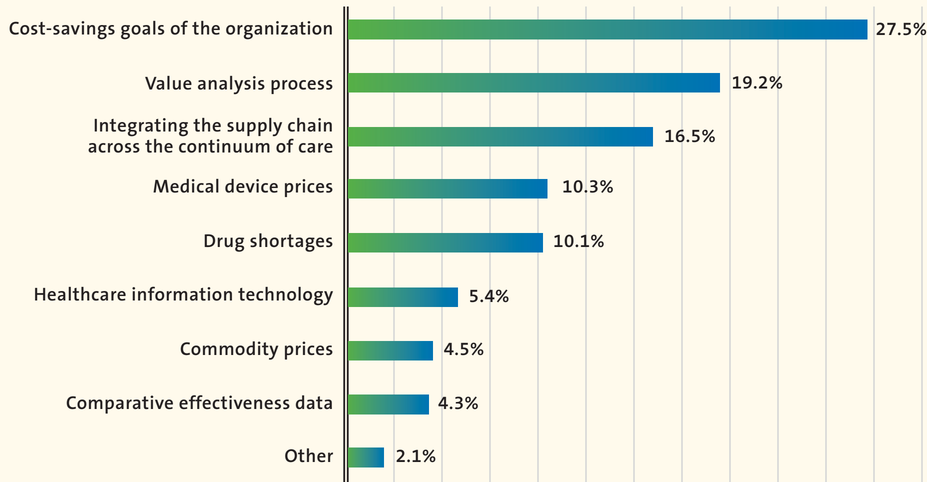
"When I look at where our high cost drivers are, it's in the surgical procedure areas of the OR and cath lab," he says. "Culturally, as an organization, Sharp is very physician-centric, and we believe strategically in giving our physicians choices. With healthcare reform front and center, I am focused on helping our physicians understand the value of driving standardization and how we strategically align ourselves with suppliers. If we continue to use every product in a service line that's out in the market, it certainly diminishes our ability to aggregate and leverage our economies of scale for driving costs out."

As for the conundrum of developing partnerships with clinical stakeholders, Davis is a firm believer in bringing physicians to the table. "They have to be engaged in decision making, and you have to solicit their opinions on why, clinically, a certain strategy will work or not work."

One of the first things Davis did after joining Sharp was getting on the meeting agendas of physician groups. That effort helped him in developing relationships and trust with physicians, while also engaging them in the decision process for product strategies. Another strategic approach that has proved to be beneficial has been the creation of a "physician academy."

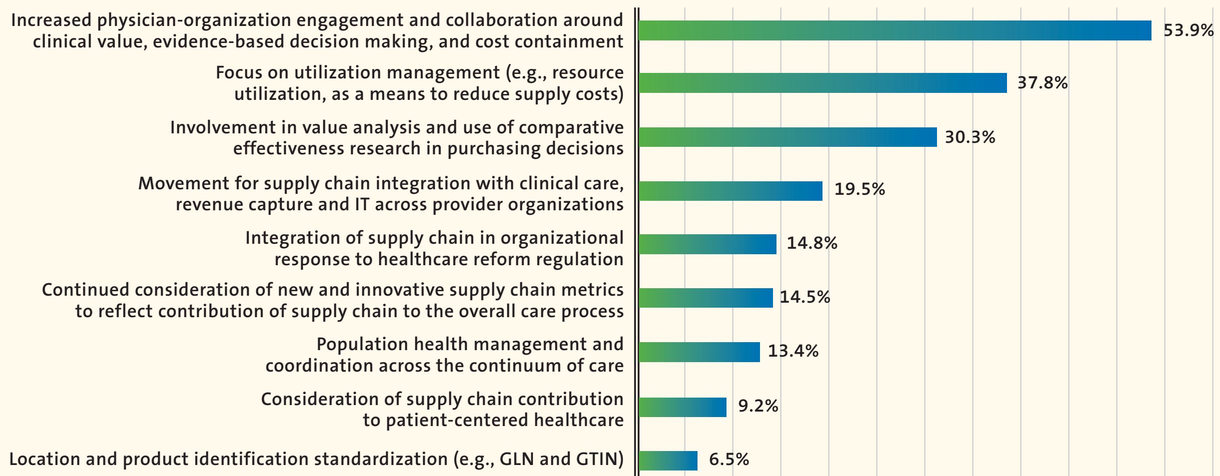
"Part of that education is helping our physicians understand the focus of Supply Chain Services and the reasoning behind a lot of its product and vendor strategies. To keep our focus on driving costs and savings, we constantly remind them that

Figure 3 | **Factors with greatest impact on supply chain over coming year**



Source: Premier online survey for Economic Outlook Fall 2012 publication

Figure 4 | **Marketplace trends with highest expected impact on supply chain in coming year**



Note: Data represents combined percentage of each trend listed as a choice
Source: Premier online survey for Economic Outlook Fall 2012 publication

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Major impacts on the supply chain

Internal impacts: Cost-saving goals, value analysis

Survey respondents most often name cost-saving goals, followed closely by such factors as the value analysis process and integrating the supply chain across the continuum of care as the factors they believe will have the greatest impact on their organization's supply chain in the next year (Figure 3).

The process of value analysis is even more compelling, given the growing importance of physician engagement. When he came on board in 2009, Davis says he started questioning the structure and process of Sharp's value analysis process because "it had no MD visibility."

"My goal is to have at least one or two physician champions engaged in every value analysis discussion," he says. "So when I look strategically at what I'm trying to do from a supply chain standpoint, not only am I focusing strategies on cost, but also on quality of products, care and clinical effectiveness. It's imperative we have their engagement to drive those decisions."

External impacts: Collaboration, utilization management

Respondents were asked to name the marketplace trends that they expect to have the greatest and second greatest impact on their organization's supply chain over the next 12 months. The majority (54 percent) indicates increased physician-organization engagement and collaboration around clinical value, evidence-based decision making, and cost containment as their first or second choice (Figure 4). A focus on utilization management (38 percent) and involvement in value analysis and use of comparative effectiveness research in purchasing decisions (30 percent) are also important trends.

Supply chain challenges

One thing is clear: The number one general trend affecting every provider in healthcare today is reimbursement and all of its uncertainties. It is the leading trend among nearly half (43 percent) of survey respondents (Figure 5). Moreover, 75 percent of all respondents list reimbursement cuts among the top three trends impacting their organizations in the next year.

Health information technology requirements are cited as the second greatest general trend affecting healthcare in the coming year, according to respondents. This is likely due to the pressures of developing and implementing EHR and achieving Meaningful Use standards.

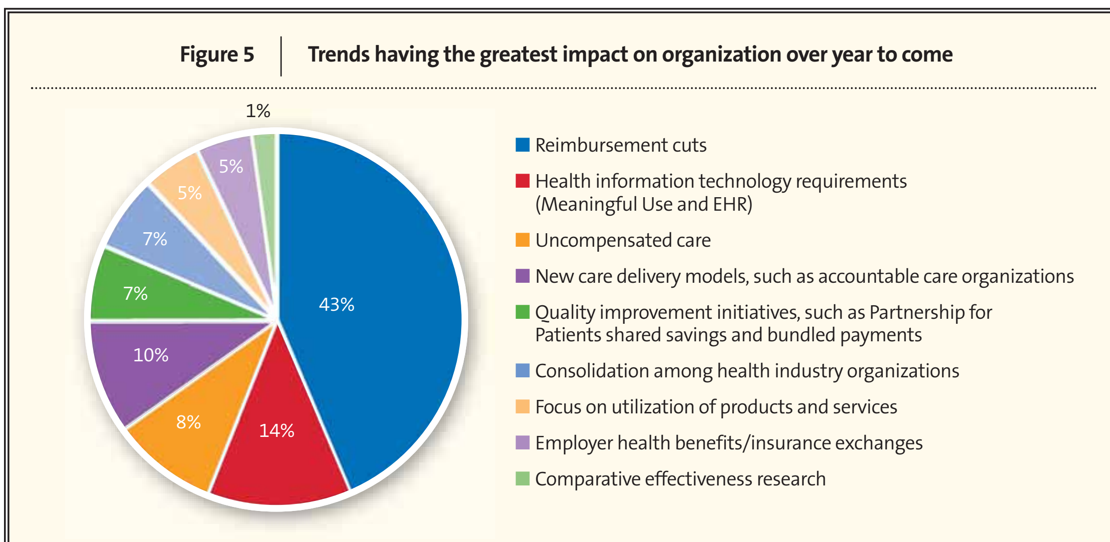
Trending higher from our previous surveys are: new care delivery models, such as accountable care organizations; quality improvement initiatives, such as Partnership for Patients, shared savings and bundled payments; consolidation among health industry organizations; and employer health benefits/insurance exchanges.

Frank Fernandez, assistant vice president of supply chain services, Baptist Health South Florida, Miami, FL, says healthcare cost pressures are at their highest levels ever.

"Cost pressures are in direct response to the perceived uncertainty associated with the Affordable Care Act and the expected changes in reimbursement from Medicaid and other sources," Fernandez says. "I've never experienced such cost pressures in our industry before. Putting it in perspective, I was at Baptist in the early 1980s when we went from fee-for-service to prospective payment, and we thought that was going to be the end of the world, yet we managed to keep our organization financially strong then and will do so again."

Fernandez says the pressures permeate not only the supply chain but all aspects of his organization. "As with anything else, you can view this as a curse or a golden opportunity for the healthcare

Figure 5 | **Trends having the greatest impact on organization over year to come**



Source: Premier online survey for Economic Outlook Fall 2012 publication

supply chain to pursue some of the things we've always talked about, like standardization and evidence-based decision making around clinical preference type items."

O'Connor agrees that plunging reimbursements have ratcheted the pressures up. "We're being asked to reduce the cost of supplies, which leads to reducing the cost of innovation and new technology, and impacts supply utilization," he says. In addition to declining Medicare and Medicaid payments, Henry Ford, like most hospitals, has seen its indigent care burden go up, "which is creating challenges. There's no more room for absorbing new technology or inflation," he says. "Our most significant challenge is finding ways to reduce costs, and there's no one-size-fits-all strategy."

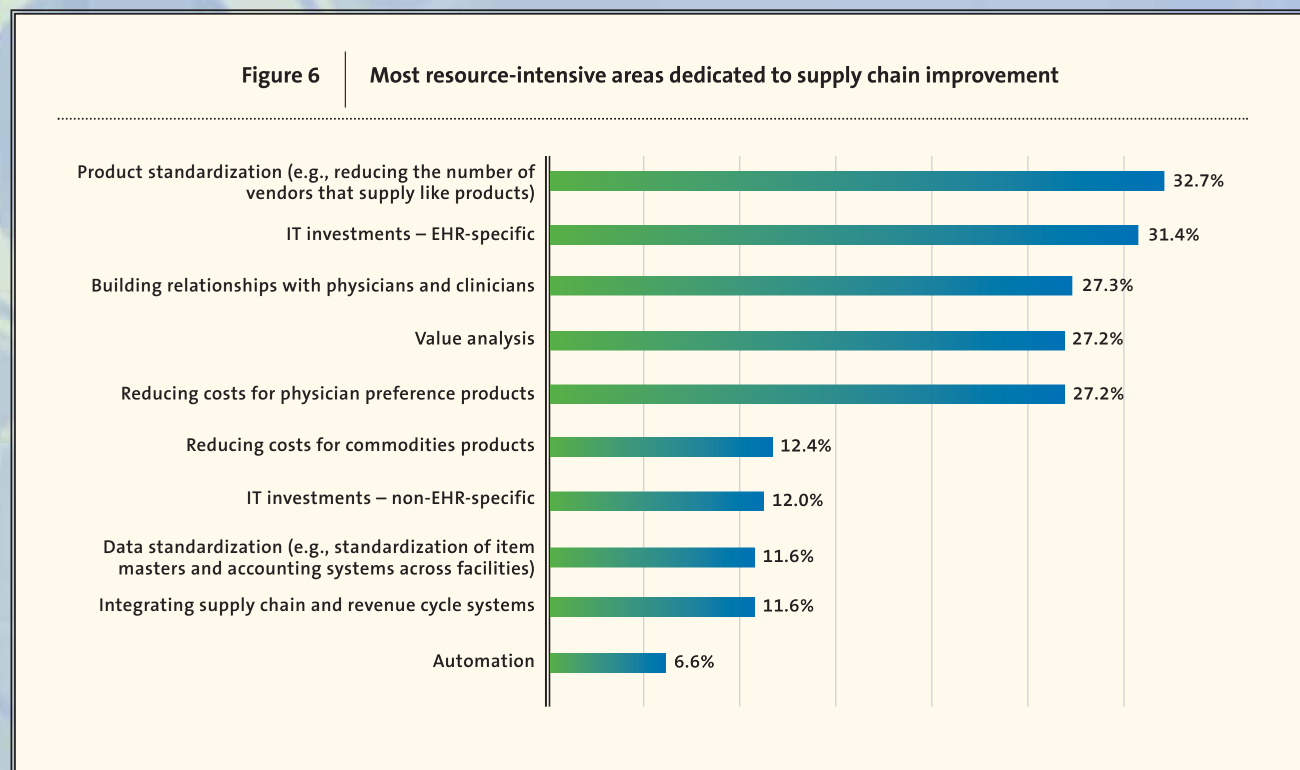
Similarly, Mount Sinai's McCarry says in spite of all the success Mount Sinai has had making inroads with physician preference and cost containment through better utilization, outcomes data remains elusive. "We need to be able to justify the expense of a new product with better clinical outcomes, and right now, we don't have the data to do that. As healthcare reform progresses, it will become more essential to tie clinical outcomes data to increased product and device expenditures."

Leading cost driver: Healthcare reform

It follows, then, that healthcare legislation and mandates are the leading driver of healthcare costs, according to one-third of survey respondents. Overutilization of products and services is the second largest driver of costs. (See the spring 2012 edition of the Economic Outlook for more information about medical waste; refer to the blood product utilization article in this edition for more on overutilization and cost-savings opportunities in blood stewardship).
It's difficult to find any function of supply chain management not impacted in some way by healthcare reform, but many supply chain executives view it as an opportunity to move in even more positive directions. "We are putting greater focus now not only on cost but also on the quality and clinical effectiveness side," says Sharp's Davis. "A lot of the incentives from the healthcare legislation are making hospitals and physicians more accountable for quality and clinical effectiveness with regard to how they deliver care. It's making us more accountable to our business model, and helping us better manage cost effectiveness with regard to the quality of care we deliver."

Resource-intensive supply chain activities

Product standardization consumes massive resources inside hospitals, in time and effort. Approximately one-third of respondents state that product standardization and EHR-specific IT investments are the most resource-intensive areas dedicated to supply chain improvement within their organizations (Figure 6).



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Supply chain executives are now finding the biggest standardization opportunities in specialty procedure areas of their hospitals, where technology proliferation is widespread.

When Baptist Health's Fernandez looked at his system's spine program, he discovered 11 different companies supplying a host of similar products. "That doesn't make any sense," he says. "There are maybe three to four companies that have 85 percent of the market, but we're buying from 11."

The same thing occurred on a different scale with cardiac rhythm management (CRM), where Fernandez says he sees opportunities to consolidate. "If we can reduce just one large vendor and carve out the business to smaller companies in exchange for price concessions, we're heading in the right direction," he says.

Henry Ford's O'Connor says he embarked on similar cost reduction efforts with CRM and achieved a great deal of success working with teams of surgeons and competitively sourcing products across multiple disciplines at once. Reducing the number of vendors, among other strategies, resulted in multi-million-dollar savings for Henry Ford, he says.

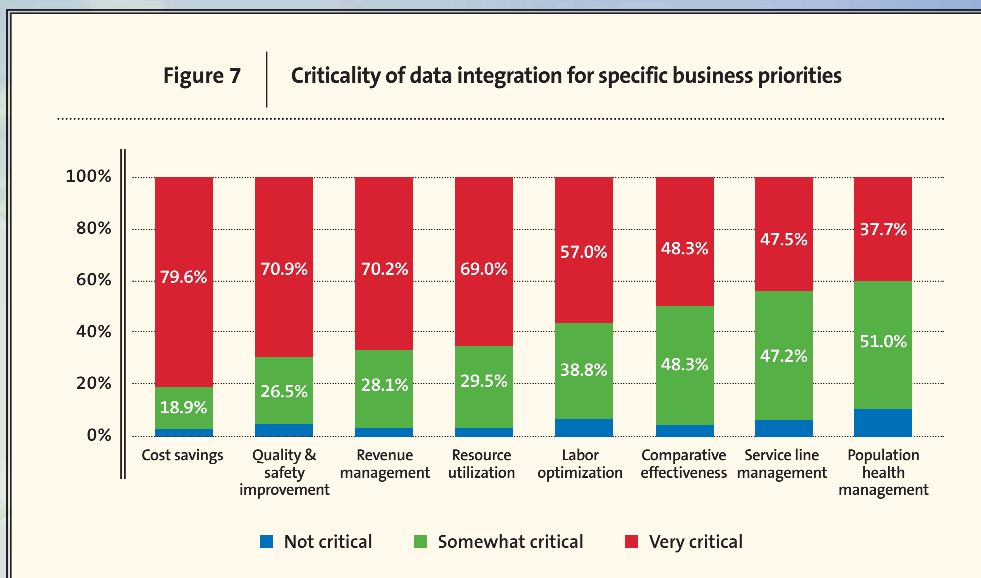
Opportunity one: Data

Against the backdrop of all these challenges and impacts on the healthcare supply chain are opportunities. One of them is what many executives believe to be the next great one: data.

Many observers believe the healthcare supply chain as a whole is challenged by the need for broader data access and sharing. In their efforts to collect and manage data, improve supply chain visibility within the organization, reduce inventory and streamline processes, internal supply chain personnel are frustrated by lack of access to and inconsistent quality of data. They view it as a significant barrier to achieving excellence, since it hinders collaboration and makes it difficult to move the industry toward uniform standards. A lack of data-sharing among stakeholders is a problem. Premier's financial and clinical data collection efforts may be the exception.

Respondents seem to recognize the next opportunity wave in data; nearly half (43 percent) of them say their largest area of capital investment in the coming years will be information technology and telecommunications, presumably driven by pressures to adopt the electronic health record.

Cost savings is the one business priority in which data integration is most critical, according to respondents. When asked about the criticality of data integration for other business priorities, respondents frequently listed quality and safety improvement, revenue management and resource utilization (Figure 7).



Source: Premier online survey for Economic Outlook Fall 2012 publication

Mount Sinai's McCarry says in spite of all the success he's had in moving toward better utilization and making inroads with physician preference, clinical data remains elusive. "It's very difficult to get your hands on," he says.

Fernandez says he believes the onus to provide data is squarely on supply chain professionals like himself. "The only way to get to that data is through greater and closer collaboration between our supply chain and our physician partners," he says.

Another challenge is integrating supply chain data and clinical data to drive evidence-based purchasing solutions. "I think that's the Holy Grail, and our ability to do that is going to be enhanced when we convert our IT systems next year," Fernandez says.

O'Connor, meanwhile, says his organization has "a robust process" for using Premier financial data for product sourcing and variations in utilization. And that data can be a powerful tool for engaging physicians.

"When I'm able to use data to show them there are 29 different kinds of products we're using that fall into the same classification and then show the opportunity for quality, cost and standardization, that fosters a very cohesive conversation," he says.

To observers outside the healthcare supply chain, one of the most critical opportunities in data is a willingness to share it, according to Tim Wood, vice president and partner, IBM Public Sector Operations and Supply Chain Management.

"Capturing, integrating and analyzing data allows you to make better decisions," he says. "If you can't match clinical and supply data, collaboration is difficult."

Karen Parrish, vice president, Industry Solutions, IBM Software Group, likens the healthcare challenge to the retail sector, in which data was viewed as a competitive edge not to be shared. Parrish believes the healthcare supply chain has an opportunity not unlike that of Wal-Mart, which made the decision to integrate its suppliers into its supply chain through data sharing, something that transformed retail almost overnight.

"Data is very important to how we look at the market and how we look at ourselves internally," says Davis, who uses market benchmarking data not only from a pricing standpoint, but also to evaluate clinical utilization across the system. "Hospitals need to understand one of the values of belonging to an IDN is aggregating our spend and using that to leverage our economies of scale. This helps us drive down costs and develop strategic relationships with a variety of business partners, as having the appropriate tools and data in place gives us visibility regarding what products to utilize from which vendors."

Opportunity 2: Net patient revenues

As more emphasis is placed on hospital margin management, people are starting to see greater synergies between the supply chain and the revenue cycle, observers say. Until now, those two areas have been silos, but that may be changing.

Nearly 70 percent of survey respondents list revenue management as a critical data integration factor (see Figure 7) in the coming year. If a hospital's net margin is 2 percent, it would need to generate $50 million in gross patient revenues to gain a $1 million net margin – easy math for Fernandez but telling nonetheless.

"South Florida has seen a reduction in inpatient admissions and reimbursements, and since there are not that many more patients to be had, the opportunities to generate additional patient revenues are simply not going to be there," he says. "I think hospitals are going to focus more on reducing costs, and they're going to be looking at the supply chain to deliver those savings."

Opportunity 3: Physician preference

Physician preference is on everyone's radar. It's an area gaining traction and attention at higher levels of the hospital hierarchy, and with cost pressures mounting.

In fact, the willingness of clinicians to try non-branded physician preference items appears to be slightly increasing, according to those surveyed over the past year. While the percentage of those respondents who say they "definitely would" try such products remains unchanged (20 percent), the percentage of respondents who would probably trial non-branded items has increased while the percentage who would not trial non-branded products has decreased since fall 2011 (Figure 8).

Physician preference is a top supply chain-specific cost containment strategy for O'Connor, and that has meant working closely with cardiology, interventional radiology and vascular surgery on sourcing similar products. For example, that process allowed Henry Ford to standardize on diagnostic catheters, representing a significant cost savings. "Physician engagement is essential," he says. "If you engaged physicians, are talking to them and have their participation in the sourcing process, you're able to drive real change."

Effective supply chain strategies

Health systems are developing strategies to face current economic challenges. According to respondents, formal cost reduction programs and physician recruitment and employment are the most effective strategies for hospitals in this economic climate (Figure 9). Also considered very effective are expansion of market share and revenue cycle enhancements.

For many supply chain executives, cost reduction and other strategies are now imbued in their organizations' core business model. At the end of the day, however, the most effective strategy in the near future may be collaboration – both with internal

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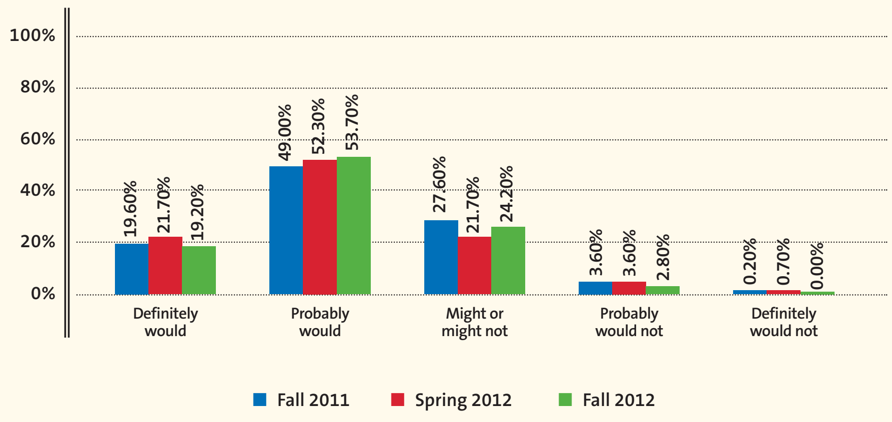
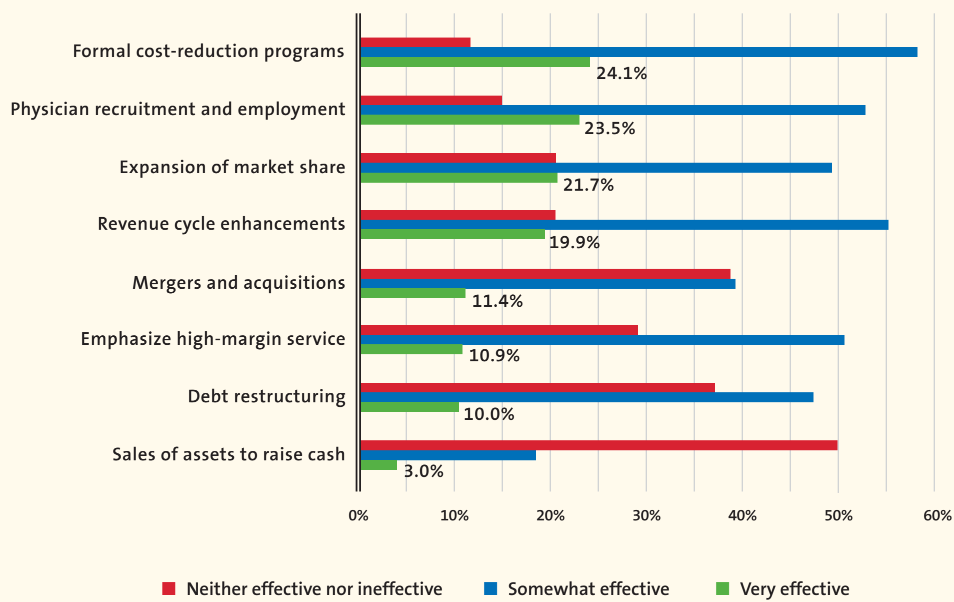
Figure 8 | Willingness to try non-branded physician preference items



Source: Premier online survey for Economic Outlook Fall 2012 publication

Figure 9 | Strategy effectiveness in responding to economic challenges



Source: Premier online survey for Economic Outlook Fall 2012 publication

stakeholders such as physicians, and external ones, even competitors.

"This is one industry where your competitor would be more than willing to open their doors and provide you with a tour or site visit, because they're so proud of what they've accomplished," Davis says, recalling his days as a Texas hospital CEO when a competing medical center invited him to view its revamped OR. "You'd never see that with Coke® and Pepsi®."

One such collaboration is putting Henry Ford Health System and Detroit Medical Center, both storied competitors, in a joint distribution center project with Cardinal Health.[3] The project is part of a massive urban renewal project to stimulate Detroit's economy.

"A lot of collaboration is going on right now in healthcare," O'Connor says. "Some collaborations are successful and some aren't, for cultural or financial reasons. Collaboration is directional, meaning people take bits and pieces of it and make it their own. But it provides unlimited opportunities."

Elevation of supply chain's role

The healthcare supply chain is evolving, as are the people who are determining supply chain procedures within health systems. "With healthcare reform, managing the bottom line will become even more important, and that means getting more people, including physicians, involved in a hospital's supply chain," says Mount Sinai's McCarry.

Davis sees the evolution of his role as a strategic imperative, and he is now looked upon as integral to the system's executive leadership.

"My predecessors weren't as engaged and visible throughout the organization as I am today," he says, noting the standing invitation he has at Sharp's CEO Council. For Davis, it offers him an invaluable opportunity to educate those at the highest levels about how critical the supply chain is to the system's future. "Supply chain leadership is becoming a strategic role now at practically every IDN in the country," he adds.

O'Connor sees the role of supply chain executives taking on added significance that goes far beyond the movement of supplies. "There's a growing acknowledgement and acceptance of the supply chain and what impact it can have not only financially but on the quality, safety and clinical sides as well," he says.

O'Connor adds, "In some cases, I think we are the catalyst for collaboration not just between hospitals but also within disciplines. The healthcare supply chain today is being viewed more and more as the facilitator for change. And I think clinicians are beginning to see our value more than ever."

Study methodology

In the summer 2012, Premier, in collaboration with Customer Care Measurement and Consulting LLC, commissioned an online survey of 13,000 healthcare leaders across our membership, representing both the acute and non-acute care healthcare markets. The survey respondents (n=617) are representative of a cross-section of our membership across geographic area and organizational size and type.

The majority of respondents (72 percent) are C-Suite, supply chain or materials management, or service line or practice area managers/directors. Nearly half of the respondents come from multi-hospital system/IDNs and midsized hospitals. Respondents are almost equally represented by hospitals in urban and rural (48 percent) areas. The survey collected data on members' perspectives on the healthcare supply chain, with a selected focus on other related financial and economic industry trends.

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