



- KIRA VERMOND -

# Supply Chain Management in Health Care: The OHA Taskforce Report

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**S**upply chain management had been a health care issue long before there was even a name for it. And with the most recent initiative instigated by the Ontario Hospital Association and Efficient Healthcare Consumer Response, the evolution of care will continue to grow. What did the Supply Chain Management Task Force discover? And what can you learn from its findings?

Few patients who walk down the corridors of Ontario's hospitals today would stop to think about how their doctor obtains their gloves or face masks. They rarely consider how much of their nurses' time is actually dedicated to patient care and what percentage is allocated to administrative functions. And only a minority would worry about the number of medication errors due to drug-to-drug interactions - and what these errors cost the health care system each year.

Yet, according to the most recent health care and logistics joint initiative of the Ontario Hospital Association (OHA) and Efficient Healthcare Consumer Response (EHCR), all of these issues are important - and can be dealt with via first-class supply chain management.

Supply chain management and procurement issues are hardly new to health care in Canada. Far from it. In fact, according to the OHA, hospital group buying opportunities were on the agenda at the first annual convention held by the association in 1924. Since then, numerous logistics and procurement initiatives have come and gone, all making small improvements to health care logistics along the way, but rarely ensuring a cart-blanché overhaul of a system that seems to operate by producing mountains of paper, numerous phone calls and a penchant for redundancy.

So when the OHA and EHCR came together to develop its Task Force Report on Supply Chain Management last year, its challenge was twofold: develop recommendations that would not only save the healthcare system millions of dollars, but could also be implemented in a real-world environment.

"Change is an ongoing process. Innovation is something that has to be dealt with every day," says Fausto Saponara, Vice President, Corporate Management and Business Development for the OHA.



Fausto Saponara, OHA's Vice President, Corporate Management and Business Development

## Success this time around

It is innovation - technological innovation - that the task force members hope will drive success for changes to the procurement process in health care. The Internet and Web based EDI (Electronic

Data Interchange) systems that connect hospitals and suppliers together means ordering medical supplies can be as easy as typing a few words and receiving the order the next day. And while many hospitals already use this function, the task force discovered that Canadian hospitals on average use only 10 per cent of EDI capabilities, relying on faxes and phone calls to confirm orders. Still, the technology is already there. It is just a matter of educating users on how to implement these solutions.

Bar coding is another technology that hospitals and suppliers could be using to help facilitate an improved supply chain. Retailers and other private industries are already using the technology to track items as they move through the system. Doing the same in health care could mean fewer medical errors from giving the wrong patient the wrong medication - something that can happen if pharmaceuticals aren't tracked properly.

But beyond today's improved technology, another important factor is now on hand that could help the cause: People are now ready to be connected, says Dr. Rueben Devlin, the Task Force Chair and Chief Executive Officer for Humber River Regional Hospital in Toronto.



Dr. Rueben Devlin, Task Force Chair and CEO, Humber River Regional Hospital, Toronto

"Many ideas are right ideas, but come at a bad time," he says. "People have a mindset for it now. They're certainly more accepting of combining these types of processes."

Looking at the list of the 30 task force members drives this point home. For the first time hospital administrators, suppliers, consultants and even members of other private industries all sat in the same room together to discuss how supply chain management could be improved in the health care sector with the common goal to take costs out of the system as a whole.

## Why supply chain management?

There are a number of reasons why hospitals need to look long and hard at how they manage their supply chain. The main reasons? Cost and risk.

Ontario hospitals spend over \$1.65 billion annually on consumable goods, medical supplies and pharmaceuticals. It costs the Ontario health care system more than \$250 million to procure and manage these supplies. With today's combination of a system under pressure - approximately 70 per cent of Ontario hospitals operate in a deficit - and a looming financial crisis, hospitals need to improve efficiency anywhere they can to protect today's health care system as we know it.

“There are still ways that we can provide the same care for less cost. I’m not saying there are a lot of those around, but this is one we’ve identified,” says Dr. Devlin.

Developing an efficient supply chain means more than simply saving a few cents. The task force discovered the Ontario health care sector could expect to see a minimum of \$120 million saved annually through more efficient managerial processes, reduced inventory and more efficient handling of goods within the health care supply chain. Given that Ontario represents about one-third of the Canadian health care market, the total savings across Canada would be approximately \$350 million a year.

“If we look at all our systems in this way to make them more efficient, it means that every dollar is well-spent towards health care. But it’s not just the money, it’s developing a better system,” Dr. Devlin says.

Developing that improved system is the other area the task force focused its attention on - namely on how improved tracking of medication through the supply chain could lower the incidence of medical error, reducing the average length of time patients stay in acute care hospitals.

Nigel Wood, a Task Force member and Director of Industry Relations for the Electronic Commerce Council of Canada, says it is this kind of thinking that sets the health care system apart from the private industries when dealing with supply chain management.

“As far as I’m concerned, it’s all about better patient care and we tend to forget that sometimes. It’s not just about moving boxes in a warehouse. It’s ultimately about tracking that product from the warehouse right to the patient,” he says.

## Standardization in the supply chain

One of the main ways to drive efficiencies into the supply chain is through standardization of hospital supplies. These supplies can range from IV solutions, gloves, biologicals and drugs to office and general maintenance supplies.

At present, for many hospitals the top 50 suppliers are major medical supply and pharmaceutical companies that represent approximately 60 per cent of the hospitals’ purchasing volume. The other 40 per cent come from thousands of small suppliers and medium-sized distributors. Because there are so many suppliers with different purchasing mechanisms to wade through, it is no wonder hospital nurses and administration spend a good portion of their time ordering and tracking supplies.

Physicians and clinicians have huge influence on the ordering in their hospitals, as they are often the people who request these supplies and drive the system. The lack of standardization is partly due to clinicians being unaware of the extra costs associated with having to order 100 styles or types of an item instead of 20, the report says.

Dr. Devlin says standardization is important for other reasons. Storage is often a problem when numerous items are ordered. The manpower needed to sort through 120 pairs of gloves, for example, can be time better spent elsewhere. And of course, standardization between hospitals would mean the whole health care system could benefit from the savings generated by economies of scale.

Smaller hospitals in particular could benefit from standardization, says Dr. Devlin.

“We’re concerned about smaller hospitals because they want to stay

up-to-date, but they can’t afford the same type of IT department that I can afford in a larger hospital. It makes sense to share the resources and the expertise so they can be part of a network,” he says. “Everybody doesn’t have to have control over the purchase of gloves and IV bags. We set some standards and move forward.”

## Reducing medical errors

Many agree the impetus for change in health care logistics will come from different directions. As medication errors begin to creep up on the government’s radar screen and it begins to fully comprehend their implications for patient care - and the bottom line - resources will be put towards implementing IT solutions to lower errors.

Only a few hospitals in the U.S. have implemented software programs for reading bar coding on drugs and relating it to patient information. But at Concord Hospital in New Hampshire, a progressive facility that does have such a system, in the final six months of a two-year study medication errors were reduced by 80 per cent.

“There are all kinds of opportunities carried through technology,” says Mr. Wood.

Having the ability for the left hand to know what the right is doing is another substantial benefit of having a suppliers tracking system in place. If a patient’s information is linked throughout a hospital - or even the whole health care system - then two doctors treating the same patient can access the same information in real time. Up until now physicians have had to rely on written files (and sometimes it can take days or weeks for the information to be filed) or simply asking the patient for his or her own medical history. Not always

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possible if the patient arrives at the hospital unconscious.

Computer records can also increase overall patient safety as well. Orders are standardized - physicians must enter dose, route and frequency, eliminating the possibility that the next person reading it will misinterpret the information. And computerized information eliminates illegible handwriting - especially on prescription drug orders.

Looking at all these issues, the task force took the U.S. research findings and used a cautious equation to indicate that savings expected from implementing IT solutions to reduce medical errors in Ontario could equal 40 per cent. Then using the most recent data from 1997/98 that indicated patients spent an additional 600,000 patient days in hospital as a result of medication errors, it concluded a 40 per cent drop would save the province \$200 million per year. Liability and insurance savings are in addition to these savings.

Other ways to take advantage of IT systems? Dr. Devlin says a computerized database of information and tracking abilities could mean acting as another safety check before people give blood. Or clinicians could track implants, such as a pacemaker, to discover its life history and record any problems.

“There are quality issues there that would be very helpful,” he says.

## Nurses at the bedside

One of the main complaints hospitals hear from their nurses is they're spending too much time working at administration functions, and not enough time giving patient care. The task force determined that developing efficiencies in the supply chain could eliminate some of the administration time.

The task force report includes a 1999 study conducted by Toronto's Sunnybrook and Women's College Health Sciences Centre that indicated only 81.2 per cent of a nurse's time is dedicated to patient care. A full 10.5 per cent of his or her time is spent on warehousing and sourcing activities - normally associated with supply chain management functions. By implementing correct use of strategic sourcing management, centralized purchasing and EDI, the task force concluded the province would not only keep the nursing profession happier, but also create millions of dollars of patient care value.

“This might be a start in the right direction,” says Dr. Devlin.

## Public and private sector differences

When it comes to supply chain management, some argue there is little under the sun that has not been tried before. And that might be true. The private sector has long taken the initiative regarding the supply chain and driven efficiencies into the system, driving costs out. The automotive, aerospace, grocery and other industries that rely on many suppliers have had to find ways to keep redundant work low and ease-of-use high.

But the private sector has developed a different logistics model over the past decade as giants such as Wal-Mart, Ford and GM have forced its suppliers to do things their way - or no sale. Many smaller suppliers have been forced to change their computerized order and tracking systems to accommodate their customers' needs.

The health care system, however, is running in the other direction.

Many medical suppliers have already built their supply chain management systems, making investments in EDI and bar coding,

hoping the hospitals will buy in. But, with the exception of a few hospitals such as London Health Sciences Centre and St. Joseph's Health Care, London; and Sunnybrook and Women's College Health Science Centre among a few others, hospitals are looking the other way, believing only the suppliers will benefit from their systems.

“You can only push your customers so far,” says Mr. Wood, who admits health care is more sensitive than the private sector and hospitals will not order an item simply because the supplier can deliver it by a certain time.

## Other challenges

Getting hospitals' CEOs, CFOs, senior management and even the government to look seriously into making improvements to the health care supply chain can take some work. CFOs, for example, are dealing with emergency room issues, consolidating hospitals and a broad-spectrum reduction of services.

“But when you start to talk to them about the supply chain, they have this glazed look in their eyes,” says Mr. Wood.

About the government's interest in funding logistics changes, he is even more blunt.

“Let's face it. There are no votes in supply chain,” he says.

Even convincing physicians and clinicians - people who have a great deal to win if their supplies arrive when and where they need them - can be difficult. Getting consensus from physicians is never an easy task, but Dr. Devlin says with a little education, most will grant it.

“They don't like to be told. They like to be asked and be a part of the process. If you take that approach, then you get a lot better cooperation,” he says.

## The next steps

Although organizations such as the OHA and EHCR are important in educating the health care industry and government about improving supply chain management, education alone is not enough. Implementation is the only way for change to take root, says Mr. Wood.

“Ultimately it has to be hospitals and manufacturers that step forward and say, ‘Hey, we've got opportunities here. Let's go after them,’” he states.

The OHA will continue to play a leading role in supply chain management to ensure that the ideas and opportunities translate into action. By proving the concept that efficient supply chain management means a reinvestment in other areas of health care, it's hoped that more hospitals and suppliers will join forces and develop strategies for change.

Taking the next step and agreeing on deliverables, such as a pilot project, is a move in the right direction, but securing government funding and other resources is critical to implement the system-wide solutions.

“It was agreed that the goal is not to shift cost between buyers and the suppliers, but to take cost completely out of the process so both suppliers and buyers benefit from it. That's the ultimate goal. Then everybody wins,” says OHA's Mr. Saponara.

