

Transforming the Canadian healthcare supply chain: creating the future roadmap for success

ABSTRACT

This article describes the efforts that are underway to create a standardized healthcare supply chain in Canada, affecting change and eliminating obstacles that have prevented full adoption in the past. Recent developments will accelerate the creation of one of the most modern supply chain systems in the world, with the full involvement of the government, healthcare provider (i.e. hospital), supplier, group purchasing organizations (GPO), and service provider communities.



Article by **Herb Martin**

Introduction

Looking back, there is little doubt that 2008 will be considered a major turning point for the Canadian healthcare supply chain. Two organizations with similar goals and aspirations – standardized supply chain, state of the art electronic commerce environment and cost reduction – amalgamated into a single organization with a common objective: patient safety. CareNET, an association of healthcare facilities and suppliers across Canada, signed an agreement to amalgamate with GS1 Canada. Equally as important, various provincial governments provided funding and leadership to expedite the movement to a supply chain that utilized GS1 global standards. These events will enable Canada to create a sustainable model for the future – a model that will achieve the supply chain goals that the entire industry has strived to attain for so many years. A 15-month initiative, the Canadian Healthcare Supply Chain Standards Project, will develop the necessary standards and provide implementation guidelines and tools to drive consistency and interoperability across the sector.

In a parallel initiative, GS1 Canada also has made significant inroads in the pharmacy sector, among both retail pharmacies and pharmacy sites within the hospital community. The GS1 Canada Healthcare Pharmacy Sector Board is comprised of 18 senior executives. The Board identifies projects that support the adoption of a common system of supply chain

standards in healthcare institutions and retail pharmacy in order to improve patient safety, cost efficiency and staff productivity, ultimately ensuring that Canada's healthcare trading partners are able to fully operate in an increasingly e-driven global supply chain reality.

The Board views the pharmacy supply chain from the point of manufacturing to the point when the pharmacist receives payment for prescriptions, including the insurance claims process. Traceability has been positioned as the foundational supply chain element to drive efficiencies and safety.

Projects to enable complete supply chain traceability include the identification of Canadian requirements in pharmaceutical product identification (such as information imbedded within a bar code), the population of a national pharmaceutical product registry, as well as the GS1 Canada Certificate of Authority Service, which enables the secure, electronic procurement and tracking of controlled substance (narcotics) orders.

Background

In the late 1990s, a group of industry leaders – including healthcare institutions, suppliers and GPOs – formed a Canadian version of Efficient Healthcare Consumer Response (EHCR). This committee proceeded as a healthcare sector-driven initiative with a mandate to significantly reduce



healthcare supply chain costs. Ten years later, the committee no longer exists and many of the recommendations that were not fulfilled still remain as valid now as they did then. Why did this happen? The most often-quoted reason is that all of the past efforts were made by volunteers who devoted as much of their time as their full-time employment would allow, but it simply wasn't enough. As well, funding and strategic priorities pushed supply chain projects to the back-burner. However, as we progress, supply chain perception is shifting from simply moving boxes to becoming the key enabler of patient safety, traceability, sustainability, interoperability and cost containment. Looking back at the events of history has provided the motivation to ensure that this situation does not reoccur.

CareNET represents over 450 hospitals across Canada, more than 95 suppliers and distributors, and the two national GPOs (HealthPRO Procurement Services Inc. and Medbuy Corporation). Since 1990, CareNET has been instrumental in promoting the advancement of electronic commerce (e-commerce) in the healthcare sector, along with the e-commerce standards for electronic trading, with a goal of reducing supply chain costs.

Since 2007, GS1 Canada has been moving forward with its plan to integrate GS1 standards into the Canadian healthcare system. GS1 Canada's goal is to introduce to the healthcare sector the same efficiencies that have already

been experienced by others, including grocery and retail. The vision of tracking and tracing all healthcare products – from the point of manufacture to the point of use (patient bedside scanning) – would result in an efficient and safe supply chain.

At the close of 2008, CareNET members voted and the agreement was signed to amalgamate with GS1 Canada.

Another 2008 milestone occurred when GS1 Canada, with CareNET's strong endorsement, received approval for its application for funding from the Ontario Ministry of Finance's OntarioBuys program to promote supply chain efficiencies for its broader public sector (hospitals, schools, universities, etc.). The application outlined the first three phases of an ambitious program to define and implement a standards-based structure for the healthcare supply chain. OntarioBuys agreed in principle to fund up to 70% of the proposal entitled the Canadian Healthcare Supply Chain Standards Project, subject to GS1 Canada receiving commitment for the remaining 30% from other provincial jurisdictions and corporate enterprises. OntarioBuys added the stipulation on partial funding to ensure that all of Canada was behind this new approach to healthcare. By implementing an aggressive outreach campaign, GS1 Canada has received approval for over half of the remaining 30% from the provincial governments of British Columbia, New Brunswick, Nova Scotia and Alberta, as well as a number of corporate contributions.

The New Direction

All of the necessary building blocks are in place to create the groundwork for future success. Already, we are beginning to see the results of these efforts, including:

- The former CareNET Board of Directors (10 hospitals, 10 suppliers) remains in place as the CareNET Healthcare Sector Board in GS1 Canada, with the mandate to set the future direction for healthcare in Canada
- A majority of board members have also agreed to participate on a newly-formed CareNET Healthcare Standards Council to approve the future direction for healthcare standards development and implementation timelines
- A Healthcare Technical Standards Working Group has been formed to create the standards for future e-commerce in healthcare. This group of more than 30 individuals from across Canada, comprised of hospitals, suppliers, distributors, GPOs, network gateways (Value-Added Networks) and service providers, will prepare the recommendations for future standards and forward them to the CareNET Healthcare Standards Council for approval.

The GS1 Canada Healthcare Pharmacy Sector Board will have a representative on the CareNET Healthcare Sector Board, and vice versa, to ensure the transfer of knowledge

between the two boards. The pharmacy board is also supported by a Pharmacy Standards Work Group.

The proper structure for future success is now in place. CareNET brings the membership of devoted providers, suppliers, GPOs and service providers to the table. GS1 Canada brings an association with many years of experience in e-commerce and supply chain standards. More importantly, the onerous demands on volunteers to continue the momentum will be supplemented with the experience of GS1 Canada staff.

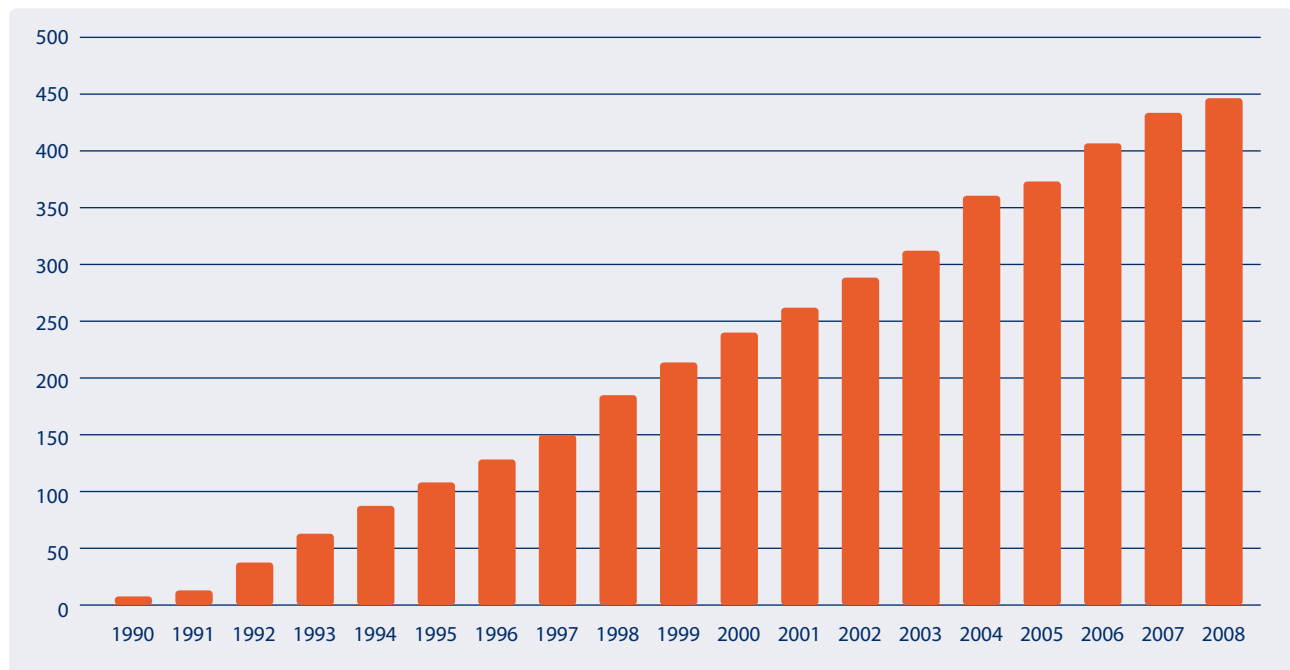
What Are We Trying to Achieve?

Our ultimate goal is to achieve a standardized, efficient healthcare supply chain. This very simplistic statement, although it defines the objective, requires a great deal of advance planning and work.

Clearly, the initial benefits are obvious. By implementing a standards-based supply chain, using technologies that are designed with a global perspective, reduced costs will accrue to both the provider and supplier community. This cost effectiveness will enable additional funding to be directed to patient care.

Moreover, using global standards – such as Global Trade Item Numbers (GTINs) and Global Location Numbers

CareNET Hospital Member Growth



(GLNs) for product and location identification, respectively – throughout the supply chain will enable track and trace systems and automated product recall systems. Industry-adopted attributes and the exchange of clean data between trading partners will ultimately become entrenched in healthcare systems and drive efficiencies.

The final achievement will be enhanced patient safety. Future systems will track a product throughout the entire supply chain, from point of manufacture to point of use at the patient's bedside, ensuring that the right patient receives the right dose of the right medication at the right time.

Canada is not unique in moving forward with this plan for the future. This strategy is directly linked to the global GS1 Healthcare initiative. Although we track the efforts of other countries, we are confident that we shall soon have in place a sustainable model for others to follow.

The Global Perspective

For the past 20 years, Canadian healthcare has been advancing its electronic transaction processing infrastructure, as more hospitals and suppliers upgrade and enhance their back-office systems to provide the functionality required by their trading partners. Although there have traditionally been shortcomings in the information exchange, for the most part, the advancement of electronic commerce has served the healthcare industry well.

We are now at a stage when we must assess the current environment and establish an industry roadmap for the future that incorporates both the experience that has been gained over the past years and the requirements for future technological changes and demand to operate a sustainable, efficient and safe healthcare system.

AUTHOR

Herb Martin, in his role as the CareNET Manager, is responsible for the administrative tasks associated with the day-to-day operations of CareNET. CareNET is Canada's healthcare sector strategy to standardize the healthcare supply chain. Through its amalgamation with GS1 Canada, CareNET represents over 450 Canadian healthcare providers and 95 leading suppliers. CareNET

To properly develop the systems of the future, Canadian healthcare must define the basic requirements for the exchange of electronic business documents. These basic requirements will include global data requirements such as GTINs and GLNs to facilitate the tracking of products throughout the supply chain. Just as the retail and grocery sectors have successfully demonstrated for many years, guidelines for basic bar coding of all medical products entering the healthcare supply chain will be implemented and enforced. As Radio Frequency Identification (RFID) becomes a widely used technology in healthcare, the standards will be implemented and available for all members.

With all trading partners moving forward with a common set of global standards, products that arrive from within and outside Canada can move through the supply chain with confidence, and can be tracked to determine both their origin and their final destination.

Conclusions

As of Spring 2009, we are now well on our way to creating a foundation for future success. The critical components of this foundation are:

- Start-up funding
- Strong government support
- Commitment from all stakeholders in the healthcare industry, across the entire country
- Combined efforts of a strong healthcare association and GS1 Canada
- The creation of a sustainable model for the future.

will identify projects that will support the adoption of a common system of global supply chain standards in healthcare institutions. CareNET's goal is to improve patient safety, cost efficiency and staff productivity, and ultimately ensure Canada's healthcare trading partners are able to fully operate in an increasingly e-driven global supply chain (www.carenet.ca).