

**CASE STUDY**

## Simplifying Consignment-Implant Purchase Orders with Automation

**Medtronic Canada implements a customer-centric solution—improving efficiency and expanding digital commerce**

## Highlights

Solution-enabled customers achieved a **99-100% consignment-implant order type accuracy rate** as measured over a 3-month period and **>90% reductions in overall order type error rates.**



Increasing touchless orders by automating consignment-implant orders **drives greater efficiency and accuracy**, enabling providers to get the critical products they need for patient care.



**“It’s an amazing configuration that captures consignment-implant order data elements, takes them out of the wrong places and puts them in the right ones,”** said Stethem. **“We like the solution because it is customer-focused—it doesn’t place the burden on the provider to make process changes.”**



Medtronic Canada is further positioned as a partner that is easier to do business with by keeping their customers’ challenges top of mind and **working on solutions together** to overcome them.

## Situation

The challenge for complex consignment-implant purchase orders (POs) is in communicating the identifying details—such as lot and serial number at the order line level—in a standard way. Because there is no industry standard for where the healthcare provider organization places these details or how they are formatted, the supplier is faced with consignment-implant POs that vary widely. To complicate it further, these orders are often referred to by different names such as bill only.

With consignment-implant POs causing unnecessary frustration, work and costs for its provider customers, Medtronic Canada partnered with GHX to implement a customer-centric solution that would make it easier and more efficient to improve and expand digital commerce.

Consignment-implant orders play a critical role in healthcare delivery, but the PO process is often complex, time-consuming, and prone to error for both the healthcare provider and product supplier.

Purchase orders for standard purchase transactions have been sent digitally as a touchless transaction from the provider to supplier for years, but consignment-implant orders feature nuances that hinder the standard

touchless transaction process, often forcing providers and suppliers to revert to undesirable manual processes.

For Medtronic Canada this process added significant time, labor, complexity and costs for the company and its customers. It also increased the risk for replenishment delays, for critical items to be unavailable when needed, and the subsequent rescheduling of patient procedures.

## The Impact

“There is a tremendous downstream effect when a provider and supplier cannot align on a consignment-implant PO,” said Montie Stethem, eBusiness Lead, Medtronic Canada. “On the provider side, purchasing, accounting and supply chain are impacted. On the supplier side, customer service gets involved in not only having to stop and manually validate the PO but sometimes rework and correct it. All of that can impact the customer’s procedural scheduling, timing, and billing of goods and inventory replenishment, so there are critical dependencies here.”

When performing consignment-implant PO reconciliation, Medtronic Canada experienced a significant drop in automated, touchless orders, from a target of 90% down to as low as 15%. Stethem estimates that each manual reconciliation can take up to 10 minutes. In some cases, a single customer account would have 50–100 transactions for reconciliation, meaning anywhere from 500 to 1,000 minutes of staff time allocated to this task.

**“Consider how we had to reconcile 50–100 consignment-implant transactions—for not just one customer but many on a regular basis—and you can understand how this significantly impacts combined automation and touchless rates.”**

**Montie Stethem**

Medtronic Canada needed to align with its customers on a clear and consistent way to communicate consignment-implant order details within an electronic data interchange (EDI) PO transaction. The method must be simple for both parties to enact, without adding labor or cost to the process. The goal was for consignment-implant POs to flow digitally from providers to Medtronic Canada with no human intervention, similarly to how other less complex POs were already flowing.

## The Solution

Medtronic Canada approached a trusted partner, GHX, to collaborate on implementing a solution. They decided upon the design and advanced implementation of GHX Intelligent Business Rules, which normalize line level data in complex PO transactions (e.g., consignment-implant, rush, drop-ship orders, etc.) to meet GHX standards and industry best practices for the applicable order type.

### APPLYING INTELLIGENCE TO IMPERFECT POs

In an ideal world every healthcare provider organization could generate “perfect” EDI consignment-implant POs that align with their suppliers’ requirements. The reality is that many have enterprise resource planning (ERP) system configurations that are rigid and difficult to customize. To overcome this challenge, Medtronic Canada worked with GHX on business rule configurations that would enable Medtronic Canada to automate “not so perfect” consignment-implant EDI orders without burdening its customers.

### YOU DON’T HAVE TO BE PERFECT, JUST CONSISTENT

With the help of GHX, Medtronic Canada prioritized its three highest volume, most complex customers with very high error rates for phase one solution implementation.

Stethem and his team were careful not to blame these customers for failed consignment-implant PO transactions or appear to be placing the burden of change at their door. Rather, they worked with GHX to position the identified solution as a simple way to

collaboratively address a challenge that was not only causing headaches and costing time and money on both sides of the purchasing equation, but also impacting the ability for providers to get items they need for patient care.

While the customers did not have to make complex and costly ERP changes on their side, they did have to agree with Medtronic Canada on a consistent format and process for sending consignment-implant POs via EDI. This meant developing a standard for which data elements must be included in the PO (consignment-implant type, lot/ serial number) and where they should be placed.

With the belief that order creation should be simple and effective and the understanding that complexity leads to noncompliance and errors, GHX and Medtronic Canada established the business rules to promote a smoother automated process. Medtronic Canada required customers to include a “qualifier” to identify the order’s consignment-implant type, for example, “BR” for bill and replace. Directly following the identifier, Medtronic Canada asked the customer to include the product’s serial or lot number.

Because many providers have ERP systems that lack the ability to deliver consignment-implant PO details in the agreed upon format, these customers can generally send the required data elements in the REF (reference) or MSG (message) segment of the EDI PO. As long as they do so consistently, the business rules can help identify the data elements and parse them to the correct location so Medtronic can process the order electronically with no manual intervention.

“When we talk about the ‘perfect EDI’ concept, in our opinion, it is about understanding and aligning our expectations, so the provider and supplier understand each other’s capabilities,” said Stethem. “When we talk about automated and touchless, we are talking about EDI files that contain this data in a complete way in the right places. And very importantly, when those PO details are aligned on, the provider sends them to the supplier in a consistent manner.”

## THE PROCESS FOR COMPLEX ORDERS

- 1 **GHX first determined the data elements Medtronic Canada requires to process EDI consignment-implant POs** and established where these elements must reside in the PO (e.g., PO header, line level). They discovered that the two most important elements that require consistent format and placement are the qualifier denoting the type of consignment-implant order (e.g., bill only, bill and replace) directly followed by the product’s serial or lot number.
- 2 **GHX analyzed Medtronic’s inbound PO data** that indicate when it is a consignment-implant order, such as a specific prefix or suffix, header or line level comments, or lot/serial numbers.
- 3 **Next, GHX configured custom business rules to identify those data elements when they are present in a PO**, categorize the order as consignment-implant and then parse the elements into the EDI locations that Medtronic Canada needs to process the order electronically.



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## The Results

Medtronic and GHX's partnership on the advanced implementation of Intelligent Business Rules has resulted in significant improvements to order type accuracy for Medtronic's group of enabled providers and is now being deployed to all eligible and integrated GHX-based trading partners.

Medtronic and its solution-enabled customers experienced a **99-100%** order type accuracy rate as measured over the 3-month period and **>90% reductions** in overall order type error rates.

"The tools and capabilities go well beyond consignment-implant, providing meaningful and measurable improvements that serve to enrich and transform digital transactions with significantly greater ease, automation and accuracy," he added. "We believe these enhanced capabilities will help to ease provider/supplier transition to more precise, standardized EDI-based processes and solutions, foster new communication and innovation, and create exciting new opportunities to ask, 'what else can we do better' for our healthcare customers and communities."

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"The results were not only surprising but astonishing, and the improvements meaningful. As the healthcare industry looks to the future of EDI leading practice across North America, Medtronic and GHX believe advanced implementation of Intelligent Business Rules is a welcome and valuable step on the path to best-in-class process controls and provider/supplier guidance."

Montie Stethem

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