



# Next-Generation EDI Mapping for Pharma

From a One-to-One to a  
One-to-Many Approach

## ✱ ca·non·i·cal kə' nänək(ə)l/

A canonical data model is generally the accepted standard within a business or industry for a process/system. In programming, canonical means “according to the rules.” The term canonical is the adjective form of canon, literally a ‘rule’, and has come to mean standard, authorized, recognized, or accepted.

# Next-Generation EDI Mapping for Pharma

## From a One-to-One to a One-to-Many Approach

### ➤ Introduction

For 30 years, trading partners within the pharmaceutical industry (pharma) have relied on point-to-point electronic data interchange (EDI) maps to manage order-to-cash and chargeback transactions. These aging infrastructures still get the job done, but it’s becoming increasingly clear that the point-to-point map paradigm is no longer a sustainable model for the pharmaceutical industry.

First, the ongoing maintenance of these abundant EDI maps, a requirement for doing business in the pharmaceutical industry, has become costly and time-consuming. Based on the GHX ROI model, monitoring and maintenance averages 20 – 25 hours per month depending on the number of trading partner connections. Second, point-to-point maps do not provide visibility into EDI transaction data flowing between trading partners to identify and proactively resolve unit of measure, pricing and product code errors. Purchase order (PO) line-level accuracy is typically 70 percent on standard EDI orders. Trading partners leveraging visibility tools can drive PO line-level accuracy above 90 percent. Third, trading partners have found it increasingly difficult to ensure the quality and reliability of their EDI using infrastructures lacking appropriate redundancy.

During the past few years, next-generation EDI solutions have emerged. These offer pharmaceutical trading partners an opportunity to improve their order-to-cash and chargeback processes while simultaneously reducing operational costs and improving operational reliability.

Rather than rely on a point-to-point model, these next generation EDI solutions utilize a one-to-many canonical\* map to connect trading partners, as well as tools to proactively identify transactional errors. These next generation solutions enable manufacturers and distributors to connect to healthcare providers using a single, standardized data map for all order-to-cash EDI transaction types. These solutions also include tools to identify and manage exceptions. Imagine having the ability to transact with wholesalers, retail pharmacies, and hospitals through one map rather than the hundreds required today. With the pharmaceutical industry facing increased pressure to contain costs and improve efficiency while improving patient outcomes, the industry is primed to take steps to transform their EDI operational processes.

### > A Proven Canonical EDI Model

The most notable benefits to using a canonical EDI data map (one-to-many) versus a traditional point-to-point EDI map include:

- Improved business agility
- Time and cost reduction
- Reduction in process complexity
- Improved EDI adoption
- Improved business continuity

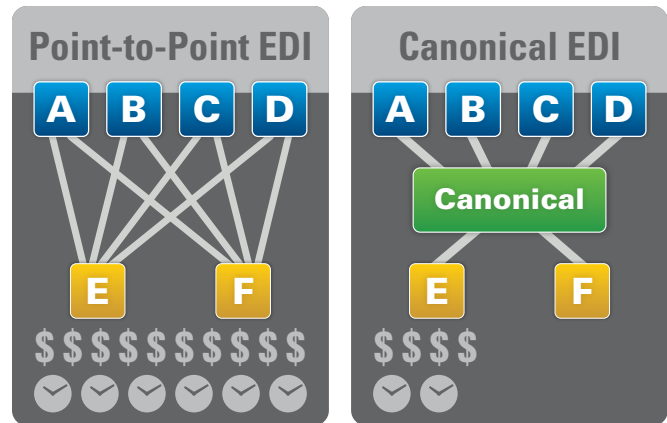
A canonical model requires that trading partners across the industry come together more collaboratively to define and set mapping specifications. While seemingly daunting, achieving a new level of standardization will help the pharmaceutical industry realize tremendous benefits:

• **A reduction in point-to-point EDI connections and maps**

When you have two transaction types and five trading partners, you need five point-to-point connections and ten point-to-point data maps. With a canonical model, you would need one point-to-point connection and two maps. With point-to-point EDI, the number of maps grows exponentially when adding new trading partners and transaction types. Using a canonical data format means less time and money spent setting up EDI connections and also less time and money spent maintaining those EDI connections.

• **Less impact from system changes and migrations**

Whenever there is an ERP upgrade or transition, every point-to-point EDI transaction needs to be regression tested at a minimum. In case of transition (e.g., Oracle to SAP), you will likely need to rebuild every point-to-point map. This results in



an enormous level of effort and cost during system changes and migrations. With a canonical data format, only one map needs to be tested for each transaction rather than each individual trading partner connection.

• **Maximized adoption of automated EDI transactions**

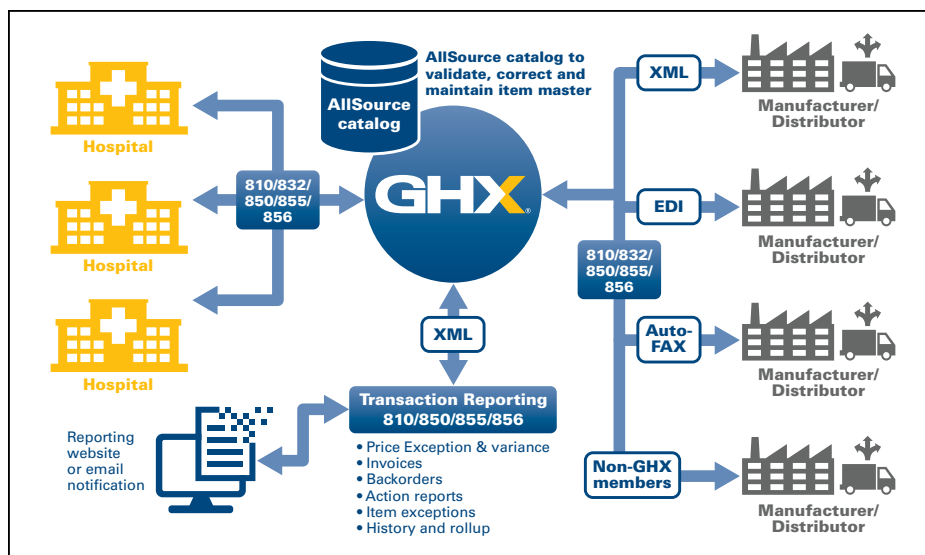
The single most important benefit of a canonical data format is the ability to connect with an unlimited number of trading partners that leverage a single standardized data model.

Organizations such as GHX have proven that this canonical model can be highly successful. More than \$61B in medical-surgical (med-surg) supply EDI transactions flow through the GHX Exchange annually. As the figure at below depicts, trading partners—from Fortune 500 companies to small community-based hospitals—use this canonical model and set mapping specifications to transact business more cost-effectively. Using these data map standards across the GHX trading partner community of 450+ integrated manufacturers, all major med-

surg and pharmaceutical distributors/wholesalers and 4,100+ providers have helped drive EDI adoption and billions in savings for the healthcare industry.

### A Proven Exception Management EDI Model

Opportunities to realize operational cost savings from automating supply chain business processes are well recognized among manufacturers across all industries. However, traditional point-to-point EDI processes do not enable visibility to



transactions, so transaction accuracy cannot be improved. By using a next-generation EDI solution like GHX, customer service representatives are provided visibility into real-time transactional data so they can proactively address numerous discrepancies between purchase orders, purchase order acknowledgements and invoices. Business rules can also be set up to prevent exceptions related to price, stock keeping unit (SKU), unit of measure (UOM) or missing data, providing the ability to review and correct these errors before they enter a supplier's ERP system, thereby minimizing orders entering an error queue.

## Why Change The Approach to EDI Now?

There are a number of compelling reasons the pharmaceutical industry should consider an updated approach to their EDI transaction model:

1. For companies that have already made significant investments in point-to-point EDI maps, the level of effort and cost to maintain maps is not sustainable.
2. Whether organizations are using a value-added network (VAN), software or other service to exchange EDI with their trading partners, there may be significant business continuity risk if redundancy is not built into their communications approach

and EDI mapping solution. Manufacturers should take the time to understand the risk of their current EDI solution and define and implement a business continuity solution for all EDI transactions. GHX can help manufacturers assess the stability of their EDI environment and identify where improvements could lead to resource and dollar savings. In parallel, we can assess business continuity risks from point-to-point connections in your current environment and suggest ways to eliminate those risks in support of your corporate business continuity objectives.

3. If an organization is experiencing tremendous growth (whether organic or from acquisition), consider employing a next-generation EDI model now in an effort to mitigate costs related to adding the headcount to manage business transactions manually.

If your EDI infrastructure is based on a legacy EDI solution and point-to-point connection paradigm without transaction visibility, you can significantly improve your business agility and continuity by leveraging a next generation EDI solution with your trading partners – whether you connect to distributors, wholesalers, retail pharmacies or directly to acute and sub-acute providers.