The Case for Vendor Managed Inventory in Healthcare

by John Strong

In healthcare we often point to the “complexity” of our supply chain as a reason for not advancing tools and techniques that have been in common use in other industries for decades. Talk about complicated? In retail, we know that Wal-Mart has mastered its supply chain. They operate 11,000 stores, stock products from more than 70 countries and manage an average of $32 billion in inventory.¹

For many of their purchases Wal-Mart uses Vendor Managed Inventory, or VMI. What is VMI? “In VMI the normal trading relationship is reversed. Instead of the customer managing its own stock and deciding when and how much more to buy, the supplier does it.”² VMI has been around for a long time in manufacturing and retail operations, but not adopted in healthcare supply chain management. Why is that?

Recently, the Strategic Marketplace Initiative (SMI) took a look at what makes a “Perfect Relationship” between trading partners. With possibly a few exceptions, there are relatively few of these perfect relationships in healthcare today. SMI identified 11 criteria for that perfect relationship, and I would argue that a number of them are critical to the success of VMI between healthcare trading partners.³ Effective collaboration was determined to be a key factor in Wal-Mart’s initiative. Let’s take a look at some of the other findings in SMI’s work because a number of the factors identified are critical to the success of VMI projects.

Institutional trust can be defined as the trust developed by individuals in two organizations that are attempting to collaborate or form an alliance. Generally, this trust extends to positions both above and below the person in each organization who are attempting to form the relationship. There needs to be not only trust—but honesty present, as well.

Both trading partners must have performance capability, the ability to perform as they have promised during the development of an idea, contract or alliance. Ideally, performance is measured on a continuous basis, and discussed openly.

Having clear expectations and goals of the desired relationship by both parties at the outset of a new relationship (even with a business partner you have had dealings with in the past) is critical to the implementation and success of a VMI project.⁵

The principle of holding one another accountable should be fostered by good regular communication on a regular basis, being transparent, and discussing difficult topics open, and honestly.

Transparency in the sense of creating relationships means the ability to communicate and talk openly about all issues, and share data with each other. In addition, a study by the Council of Logistics Management showed that 90% of VMI participants are comfortable exchanging information with each other.⁶

Honesty and accountability in dealings is critical, and being transparent requires a great deal of honesty. Being transparent also requires that both trading partners share enough contextual information and data to advance the relationship and answer questions.
Good and effective mutual communications\(^7\) mean that honesty, transparency and frequency are all built into the communications that occur between VMI trading partners. Over the years, well-intentioned trading partners have tried a number of various inventory ownership and service programs, most notably “consigned” inventory in healthcare. The results have shown that consigned inventory can often lead to errors, disputes between the trading partners, stock-outs and a wide variety of issues that due nothing to foster a better relationship between buyer and seller. Most significantly for the seller, managing consigned inventory takes hours of time that could be dedicated to—selling.

Clearly, developing complex relationships take a great deal of effort and hard work, as well as time. Can the effort pay off for both trading partners? Let’s take a look at some of the advantages and disadvantages of VMI, especially in the context of healthcare.

**Advantages to the Buyer**

Using VMI offers significant advantages for the buyer. These include:

- Reduction in stock-outs
- Reduced waste
- Potentially better pricing from suppliers
- Streamlining ordering and processing of high-value parts, such as implants
- Reduction of inventory and related carrying costs
- Reduction in ordering, invoice processing and payment
- Reduction of staff time to manage re-ordering
- Reduced cost of obsolete and/or outdated stock
- Less inventory takes up less space\(^8\)
- Allows focus on the 20% of items that consume 80% of the supply budget\(^9\) in areas such as the operating room.

**Advantages to the Seller**

- Creating more efficient truck routes, avoiding back-haul of empty trucks\(^10\)
- Ability to price more competitively
- Reduction of inventory and related costs
- Reduces sales representative involvement in managing consigned inventory at the customer location
- Lower supply chain costs
- Reduced waste
- Reduced cost of obsolete and/or outdated stock
- Shared risk\(^11\)

It is important to note that to work well, VMI requires that the trading partners commit to a long-term relationship. There are certain costs and opportunity costs that both parties will bear setting up the relationship, and VMI is not designed as a “quick hit” solution.

**Conclusion:**

Perhaps our time horizons are shrinking, and we don’t have the patience for long-term solutions. Unfortunately, many of the quick and easy solutions along the healthcare supply chain have now been realized. Healthcare in the United States costs too much, but trading partners, working together, can take significant cost out of our supply chain.

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\(^1\) [https://www.tradegecko.com/blog/incredibly-successful-supply-chain-management-walmart](https://www.tradegecko.com/blog/incredibly-successful-supply-chain-management-walmart)

\(^2\) [http://www.vendormanagedinventory.com/article3.htm](http://www.vendormanagedinventory.com/article3.htm)

\(^3\) Strong, John et al., “Determinants of the Perfect Relationship”, 2017 by Strategic Marketplace Initiative

\(^4\) Op. Cit.: Trade Geckos


\(^6\) See also: Frahm, Scott Op. Cit.

\(^7\) See also: [http://www.vendormanagedinventory.com/article3.htm](http://www.vendormanagedinventory.com/article3.htm)


\(^9\) Intrieri, Chuck, “The Benefits of Evolved Vendor Managed Inventory Model Led by Web-Based VMI”, March, 2015 in "Supply Chain Technology"