

# INDUSTRY REPORT: HOW INVENTORY IMPACTS FINANCIAL REPORTING

## What Every Hospital Supply Chain Leader Needs to Know About the Impact of Inventory on Financial Reporting

### Overview

Over the past decade, supply chain leaders in healthcare systems have advanced many aspects of supply chain management. They've identified new ways to automate business processes, updating legacy systems with new available technology and replacing manual, paper-based processes. They've connected disparate systems to enable data sharing and improve workflow. And, they've implemented initiatives to improve their organization's bottom line with both hard dollar savings and new labor-reducing efficiencies.

Today in many organizations, the supply chain leader reports to the CFO. In others, the head of supply chain will be called upon by the C-suite to report how effectively supply chain efforts are impacting financial results. So it follows that supply chain leaders need to understand financial matters at a strategic level, in order to help align their goals and initiatives with the larger organization.

This paper briefly examines some of the key areas that supply chain – particularly inventory – can impact, helping foster the conversations between supply chain and finance.

### Working Capital

There's plenty of confusion around the term "working capital" among non-financial-types because it *sounds* like a good thing. Surely we

need more "working capital?" But in reality, working capital is the amount of cash a company has tied up in running the business. The more cash that's tied up, the less cash that's available for other things, or the more money an organization might have to borrow to fund operations and initiatives.

There are a few ways that working capital can be calculated, but one standard is:

$$\begin{aligned} & \text{Current Assets (Inventory, Accounts} \\ & \quad \text{Receivable)} \\ - & \quad \text{Current Liabilities (Accounts Payable)} \\ & = \text{Working Capital} \end{aligned}$$

There are a number of ways organizations work to improve working capital, for example, if you reduce assets by reducing inventory or reduce the time it takes to collect money from customers (patients), you improve working capital because you have more cash. Alternatively, you can increase accounts payable by extending the time it takes to pay vendors, which will also help reduce the amount of the organization's working capital. Healthcare finance teams have been working to rebalance this equation by adjusting these factors.



## Inventory and Financial Statements

From a supply chain perspective, healthcare leaders know they must more effectively manage inventory for several specific reasons: to improve turns, reduce expiration and waste, to eliminate stock-outs, to build understanding of cost, quality and outcomes, and to create a more visible supply chain for their organization.

Inventory is a key indicator of supply chain excellence; it demonstrates how well a supply chain team is doing in terms of supply meeting demand. Where it often gets confusing is that changes in inventory levels impact different financial statements differently.

Let's say a healthcare system holds \$10 million in inventory and through various initiatives, it's planning to reduce those inventories 10% - a reduction of \$1 million. Now let's look at what happens on three key corporate financial statements: balance sheet, income statement, and cash flow statement:

Balance Sheet: Inventory levels decline by \$1 million.

Cash Flow Statement: Cash flow makes a dollar for dollar improvement, a \$1 million improvement, which takes place because working capital is reduced by \$1 million. The reduced inventory moves from being tied up in working capital and turns into cash.

Income Statement: Does having lower inventory improve profitability, not just cash flow? There are several possible ways to calculate the cost of inventory for the income statement:

1. What it costs a company to borrow money: mid-single digits right now for most organizations.

2. The company's "cost of capital" or the weighted average cost of capital, which is basically the return shareholders expect from the company's use of capital. This number ranges from organization to organization, but let's say in general it's from 8-12%.

3. Inventory carrying costs: interest costs or cost of capital plus all the other costs associated with inventory, including storage, handling, obsolescence, insurance, taxes, shrink, etc. There is huge variation in the numbers companies use and it's believed most companies underestimate their actual inventory carrying costs, which range well into double digits for many companies. The Council of Supply Chain Management Professionals (CSCMP) reported inventory carrying costs at approximately 19%, but noted that included warehouse/distribution costs.

So would an increase in profit dollars really show up on the incoming statement? This is a key question, because the cost of capital portion of inventory carrying costs is not an income statement item. But some portion of the carrying costs represent a reduction in operating expense (which does go through the income statement). The capital reduction benefit goes through the cash flow statement. Converting the capital reduction benefit (in our example, \$1 million) into an annual benefit by multiplying it by an annual cost of capital figure is done in some organizations.

Finally, note the \$1 million in inventory reduction will also improve other ratios, including return on assets and return on invested capital. By dividing profits by assets and/or capital, the denominator is now lower by \$1 million, so the percentage improves. *(see example below)*

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Impact of Reducing Inventory on Company Financials		
Financial Area	Financial Statements Affected	Impact
Original Average Inventory Level	Balance Sheet	\$10,000,000
Expected Reduction	Balance Sheet	\$1 million (10%)
Impact on Working Capital	Balance Sheet, Cash Flow Statement	\$1 million reduction
Impact on Cash Flow	Cash Flow Statement	\$1 million increase
Impact on Profits/Earnings:	Income Statement	
Using Interest Cost Method (e.g., 5%)		\$50,000 reduction in interest expense
Using Cost of Capital Method (e.g. 5-9%)		\$50-90,000 reduction in interest expense
Using Inventory Carrying Cost Method (e.g., 19%)		\$190,000 interest expense plus operational savings

**In Summary**

A supply chain leader can tell the story of supply chain success with more confidence by understanding how inventory impacts financial statements. Simply put, reducing inventory levels results in:

- 1) Reduction of working capital
- 2) Improved cash flow
- 3) Improved profitability

The other factors about inventory reduction remain true: faster turnover means greater efficiency, reducing on-hand inventory eliminates waste, and improving inventory management reduces overspending and overstocking.

It's clear that effective supply chain management is an essential strategy for healthcare organizations – and managing inventory is one

of the most important levers to your organization's financial health.

**About Jump Technologies, Inc.**

Since 2000, Jump Technologies, Inc. has delivered innovative solutions in areas including mobile inventory management, replenishment, procurement, and proof-of-delivery software to automate and streamline supply chain management. With broad experience from multiple industries, Jump Technologies today continues to expand its portfolio of cloud-based mobile solutions that reduce labor, reduce costs, and enable more automated and accurate supply management, specifically for hospitals and health systems.

