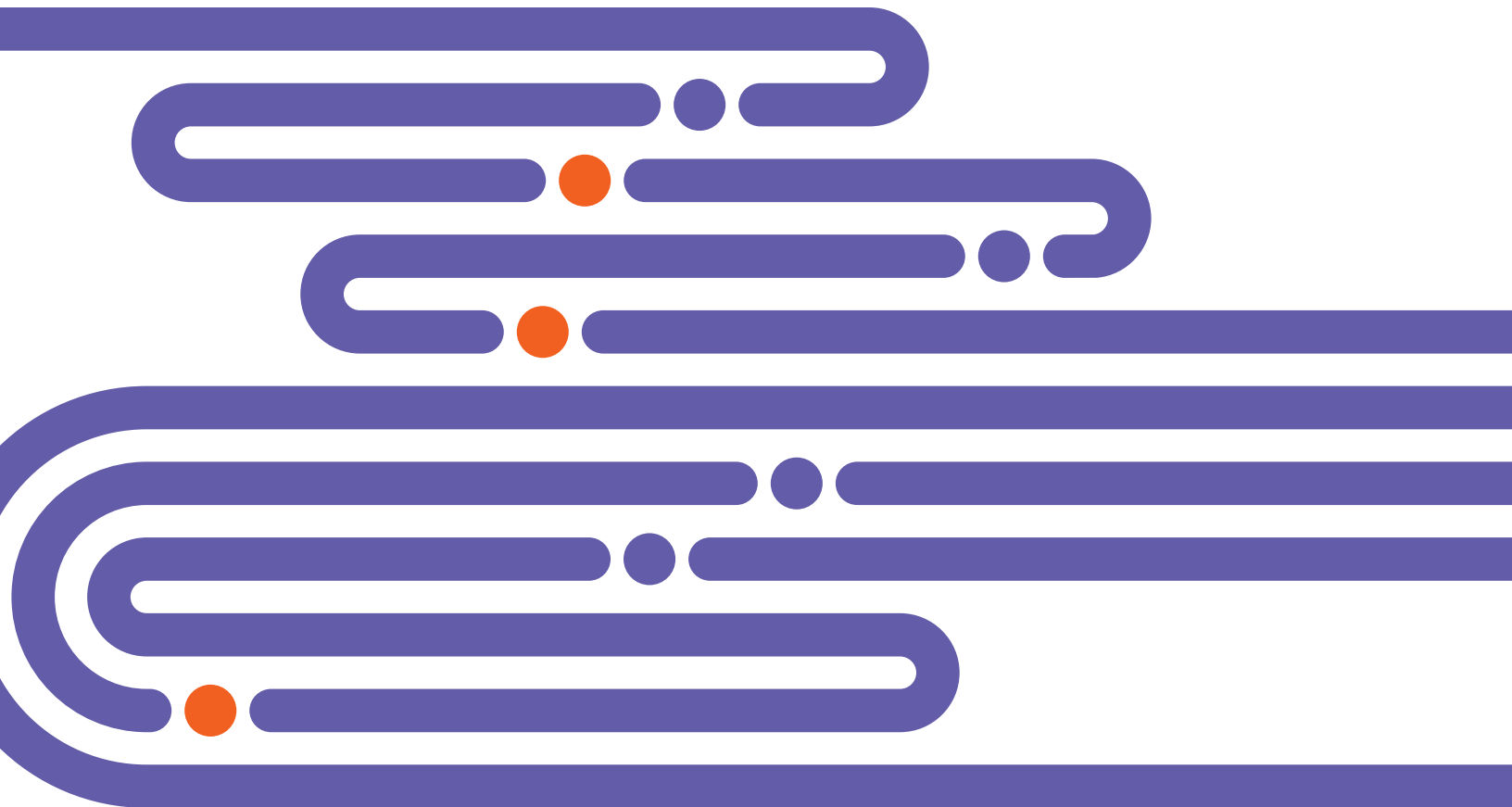


The Gold Standard for Item Master Management

Good data is where great supply chain begins



Executive summary



As value-based reimbursement becomes the new health care normal, reducing costs is more critical than ever. But as supply chain executives and managers work to incorporate this new way of thinking into their daily workflow, some may be overlooking one of the most basic, yet impactful, areas of all.

A healthy supply chain begins with a healthy item master, and many of a health system's supply chain processes begin with the item master. Errors can be costly, resulting in increased labor costs and logistic expenses and inefficient contract management and accounts payable processes, among other shortcomings. Item master mistakes can make it difficult to prove that your organization is meeting contract volume and commitment requirements.

The after-effects of incorrectly entered data (or data not entered at all) often resembles a line of dominoes, one falling sequentially after the other. One error can affect multiple departments, cause unnecessary delays, and cost valuable human resources and money that no system can afford.

Today's time- and resource-challenged organizations often rely on data cleansing experts with the scalability, resources and technology to develop their best-in-class data management initiatives. A quality item master is a huge step toward reduced costs and improved supply chain operations.

“It’s easy for health systems to underestimate the extent or depth of their data management problem. They don’t realize just how dirty their data is until the cleansing process begins.”

Tom Bozarth

Senior Director, Item Master Services
Vizient

Role of the item master

The item master is a core set of data that feeds into many day-to-day functions that are critical to hospital operations, including:

Purchase orders

- Manual orders (paper)
- Electronic data interchange orders

Inventory control

- Stock locations (warehouse)
- Bin locations
- Inventory levels (minimum, maximum, par, reorder)

Operations systems for multiple hospital services

- Epic (operating room management software)
- Pyxis (operating room inventory stations)

Many of the hospital's most basic and important supply chain processes rely on the item master as their foundation, and it drives purchasing, inventory and operating room product movement.

Costly errors— from inconsistent descriptions, missing vendor data and duplicate items to incorrect or missing catalog numbers and mismatched or missing prices and units of measure— are not something health systems can afford.

The true cost of dirty data

The quality of your item master and data management processes has a significant downstream impact on supply chain operations. Poor or weak data management processes can result in:

- Increased labor and logistic expenses
- Stagnant or increased product inventories
- Increased maverick spending
- Inefficient contract management and accounts payable processes
- Inaccurate analytics and reporting—“dirty data”

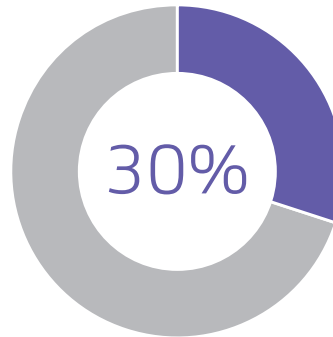
Consider this: Approximately 95 percent of a health system’s purchase order lines tie back to a product item that is managed in the item master. If that data is unreliable, you could be leaving money on the table during a time of major industry transition when every dollar counts. Vizient® experts affirm this after more than 10 years of working hands-on with hundreds of health systems to rectify their data and implement clean data processes.

Vizient research shows that approximately 30 percent of the average item master contains bad data. Therefore, an item file of 60,000 unique records would have 18,000 records that contain bad data.

Cleansing such an item master file requires significant manpower. Companies average 25 minutes per SKU annually addressing out-of-sync data integrity issues, according to research from global management consulting firm A.T. Kearney.¹

For an employee making \$38,000 annually, that means each SKU costs \$7.61 to correct. Therefore, cleansing 18,000 records could cost the average health system nearly \$137,000 annually.

Example of item file containing 60,000 records



Vizient research shows that approximately 30 percent of the average item master contains bad data.

30% of 60,000 = 18,000

Total records containing bad data

25 minutes per SKU

Average time to address out-of-sync data

1 SKU = \$7.61

Based of an annual salary of \$38,000

18,000 SKUs = \$137,000

Annual cost of cleaning bad data

1 Benefits of a PIM System. Jorij Abraham. SpringerLink website. https://www.springer.com/cda/content/document/cda_downloaddocument/9783319053226-c2.pdf?SGWID=0-0-45-1454017-p176603245. Accessed April 4, 2018.

The quality of your item master has a significant downstream impact on your supply-chain operations



How a cleansed item master can save 3% in supply costs

Over a three-year period, a 350-bed health system added four critical access hospitals, improving care across its extensive rural service network. However, merging data from the new hospitals further degraded data quality in the system's item master. Data quality was already slipping due to inadequate data maintenance following a comprehensive cleansing a few years earlier. Multiple item master entries for the same products and thousands of missing and incorrect manufacturer numbers made manually identifying and correcting duplicates an impossible task for the limited number of staff members.

The health system worked with Vizient to improve its data quality and reporting using proven technology solutions, data-driven methodologies, and an expert adviser and analyst. Vizient immediately showed the system that 30 percent of its item master manufacturer numbers were incorrect, and another

25 percent had no manufacturer numbers at all. Approximately 6,700 items were ordered multiple times but were not in the item master and 1,800 items had not been ordered in years and could be inactivated.

Together, the health system and Vizient created a project plan. The system removed all item master duplicates and added or corrected more than 10,000 manufacturer codes. The team also imported more than 25,000 UNSPSCs, 7,500 HCPCS codes and 5,700 GTINs. The system's item master completeness index is now in the top 10 percent of organizations that Vizient analytics track.

The supply chain department is seeing improvements in accuracy, contract compliance and discounts earned, and anticipates that optimized contract performance can cut supply costs 3 percent. Just as important, Vizient technology automates much of the work necessary to keep the item master current.

UNSPSC = United Nations Standard Products and Services Code; HCPCS = Healthcare Common Procedure Coding System; GTIN = Global Trade Item Number

The ideal item master

Health care continually evolves, making a 100 percent perfect item master unlikely. However, achieving an item master within the gold standard range is certainly within each health system's grasp.

Those in the gold standard range have certain characteristics in common:

- The item master has a single point of accountability and management
- Each item has a standardized item description and nomenclature
- Pricing for all contracted items is validated and updated daily
- The item master incorporates artificial intelligence technology for regular cleansing

Item master success measures

- At least 95 percent of all purchase order lines tie back to item master-managed items
- At least 95 percent price accuracy between item master pricing and contract catalog pricing

→ Global supply chain standards

The Global Standards One (GS1) standards, anticipated to go in to effect Jan. 1, 2019, will increase patient safety, supply chain security and efficiency, traceability, and accurate data synchronization in health care—effectively tying utilization, itemization and standardization back to clinical procedures and outcomes. Best-in-practice item master management should incorporate these standards. For more information, visit <https://www.gs1.org/healthcare/about>.

How item master enrichment identified \$500,000 in revenue for immediate billing

A 145-bed hospital was caught off guard when some insurance payers began requiring HCPCS codes for certain line items in order to pay claims. The urgent need to search for missing codes turned some registered nurses into makeshift medical billing coders. But team members simply were unable to find many of the codes they were missing.

To solve the problem, the hospital sent its item master to Vizient to standardize and enrich. With the help of three resulting cleansing reports, the hospital identified more than \$500,000 in revenue that could immediately be billed. The hospital now receives monthly cleansing passes that find the HCPCS codes needed for billing, and Vizient also provides standardized data on demand. This revised process and improved accuracy allows team members to use their time on other important endeavors.

Determining the depth of dirty data

Identifying dirty data can be difficult and cumbersome, often requiring manual research and validation techniques. It's often advantageous to work with a data cleansing expert to help identify dirty data, because an expert cleansing provider will have the scalability and resources necessary to normalize and isolate anomalies within supply chain source data. These providers can also recommend how to best implement corrections within the source data.

There are multiple factors that identify the depth of dirty data within your supply chain, including:

- Product descriptions that lack a consistent and standardized format (e.g., noun, application, attribute, etc.)
- Products missing vendor or manufacturer information (e.g., name or catalog numbers)
- Products with incomplete packaging data (e.g., missing unit of measure and conversion factors, as well as standardized to the American National Standards Institute code)
- A high number of errors reported through electronic data interchange transactions
- A high number of invoice discrepancies
- A high number of purchase order lines that don't tie back to an item in the item file
- A high number of purchase order discrepancies
- Poor contract pricing utilization with procurement processes

Cleansing is a continual process

An initial master cleansing to correct longtime errors and inconsistencies is an absolute necessity for health systems. But it's only a start.

Item masters are moving targets because health care continually evolves. Contracts turn over, vendors are bought out and distributors change. Health systems need to incorporate a proactive data cleansing approach that includes, at a minimum, monthly updates. Item masters are not a one-and-done concept. Left unattended, the item master will once again become out of date and full of errors.

While health systems initially attempt to manage their item masters internally, they often find the task time-consuming, costly and difficult—especially in the face of new GS1 standards set to go into effect Jan. 1, 2019. Best-in-class data management initiatives require an investment in leading technology solutions and experts who can transform your item master from a burden into a strategic asset.

As your item master improves, your health system will experience the benefits of clean data through every step of the supply chain, including:

- Increased contract compliance
- Minimized time spent resolving purchase order to invoice discrepancies
- Reduced vendor overpayments
- Maximized prompt pay discounts
- Decreased product fulfillment cycle times
- Improved quality of reporting and analytics

As the nation's largest member-driven health care performance improvement company, Vizient provides network-powered insights in the critical areas of clinical, operational, and supply chain performance and empowers members to deliver exceptional, cost-effective care.



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Vizient is here to support you. We can help you more closely align your data management practices with the gold standard and set you on the path to continuous improvement. For more information, contact supplychain@vizientinc.com.