

Case Study



One of the tools Bayhealth uses to drive greater efficiency and accuracy throughout supply chain, financial and clinical processes is GHX content and contract management solutions

Overview

Central and Southern Delaware's largest healthcare system, Bayhealth is a technologically advanced not-for-profit healthcare system with more than 3,200 employees and a medical staff of 425 physicians. Bayhealth is comprised of Kent General and Milford Memorial Hospitals, the freestanding Emergency Department in Smyrna, and numerous satellite facilities and physician practices encompassing a variety of specialties. In fiscal year 2014, Bayhealth recorded 92,041 emergency department visits, 18,420 patients admitted to beds, 2,272 births, and provided \$49.5 million in unreimbursed care to patients. The health system is an affiliate of Penn Medicine for Heart and Vascular, Cancer and Orthopaedics.

Challenges

Bayhealth, like many healthcare systems, had been manually maintaining product and pricing data within its item master. Whenever a buyer had a change (e.g. part number, unit of measure), s/he would fill out a spreadsheet request and submit it to the information technology (IT) team members responsible for item master maintenance. They, in turn, would manually update the item master, changing each product one at a time. This process was time consuming and error prone, resulting in an item master that had the potential to contain discrepancies, duplicates and missing information.

Not only was bad item master data impacting Bayhealth's procurement activities, it also presented risk for impacting other functions, including billing and reimbursement. Because Bayhealth is implementing an EPIC EHR system with plans to use its item master as the foundation for its charge master, the supply chain team knew they needed to improve the integrity of their item master data.

A major concern was that the item master did not utilize Healthcare Common Procedure Coding System (HCPCS) for all products, which plays a key role

Organization:

- Bayhealth
- Dover, Delaware
- Total licensed beds: 389

GHX Products & Services:

- CCXpert
- GHX Exchange
- MetaTrade
- NuVia®

Materials Management Information System (MMIS)

- McKesson – HEMM
- McKesson – Intellishelf
- Omnicell - Optiflex

Electronic Health Record (EHR) System

- McKesson – migrating to EPIC

Group Purchasing Organization

- Premier

Highlights:

Bayhealth worked with GHX on a master data management and contract management strategy that feeds cleansed and complete product data, as well as contract pricing, to an item master, which then supplies accurate and standardized data to an electronic health record (EHR) system, charge master and surgical services/operating room (OR) systems. This strategy enabled Bayhealth to drive greater efficiency and accuracy throughout business and clinical processes, resulting in a 90 percent contract match rate and nearly half the previous contract exceptions.



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in proper reimbursement for products used in procedures. Assigning the wrong HCPCS codes during the billing process or failing to assign codes at all can place an organization at risk for significant revenue loss.

Solution

According to Bayhealth Purchasing Manager Debbie Betts, the organization evaluated two solutions for item master management, the GHX NuVia content management solution and a competitive product. GHX NuVia is a cloud-based virtual item master that continually monitors an organization’s item master for changes and updates, and then systematically corrects product data inaccuracies, removing duplicates and infilling missing information.

While the competitive solution appealed to some of Betts’ colleagues because it offers product photos in addition to descriptions, the supply chain team conducted a more critical analysis, really “getting down in the weeds” to assess each solution’s capabilities.

“A huge selling point for NuVia is its ability to assign HCPCS codes to the products within Bayhealth’s item master because we faced a significant challenge in obtaining these codes for Bayhealth’s charge master,” said Betts. “Another feature that offered tremendous value is NuVia’s reporting capabilities. I can see where we’ve purchased items with price fluctuations and have the buyers research the causes. Without this reporting the team would have to manually combine separate reports, and scrub and manipulate them in order to get this information. NuVia does all of that for me quickly and easily, so I know where to focus my attention.”

Betts comments on how NuVia offers Bayhealth the ability to access and implement industry standards throughout the organization. In addition to HCPCS codes, GHX uses NuVia to assign United Nations Standard Products and Services Codes® (UNSPSC®), which are used for product categorization.

“Prior to implementing NuVia, we had in place our own self-developed standards and little visibility into what others in the industry were using for product standardization,” said Betts. “NuVia enables us to understand and access industry standards so that we are aligned with the rest of the healthcare

marketplace. We are measured against the industry standards so we should be using them.”

Greater Efficiency and Accuracy

A key benefit that the NuVia system provides Bayhealth is the ability to automate item master maintenance. Whereas in the past IT staff would have to manually enter product updates into the system, they can now simply review recommended changes from NuVia, then accept and upload them. According to Betts, her team is now able to “do more with less;” the item master is cleaner and transactions are more accurate.

Driving Standardization

NuVia has enabled Bayhealth to standardize product descriptions not only for the item master, but also in other systems fed by this data source, including the charge master, the Omnicell Supply Management System, Intellishelf™ and the surgical information system solution, each of which has different character limits. NuVia is able to write standardized descriptions for each system based on that system’s rules and limitations. According to Betts, this has helped clinicians more easily find the items they need.

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Tom Battista, CMRP Materials Management Information System Specialist for Bayhealth Medical Center, comments on the data consistency that NuVia provides:

“We can quickly check that the description first words are consistent, and identify possible duplicate and obsolete items,” said Battista. “Furthermore, NuVia allows us to verify items quickly without having to search through vendor sites.”

Improvements in the OR

NuVia played a central role in enabling Bayhealth to feed accurate product data from the item master to its OptiFlex™ Surgical Services (SS) system in the OR. Betts describes how previously the process of buying a product in the OR, obtaining a HCPCS code, and assigning a

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product description and charge number was manual, multi-faceted and belabored.

“One of the main reasons Bayhealth implemented NuVia was to support the OR OptiFlex™ (point of use) project,” said Betts. “The ability to assign HCPCS codes and standardize item descriptions was very important to us because we wanted to automate the OR Supply Chain with clean, consistent data. We also use NuVia to feed our IntelliShelf™ Supply (point of use) solution, from which we’ve been able to derive the same value in terms of item data accuracy and standardization.”

Greater Visibility and Control

Using the UNSPSCs assigned by NuVia to products in Bayhealth’s item master, the supply chain team generates reports to gain visibility into the organization’s total spend, as well as spend by vendor, segment, family, class and commodity. The supply chain team has used this information to standardize products, recently going from 17 different stethoscopes down to just two and are now exploring what Betts refers to as other “low hanging fruit.”

Greater Contract Compliance

To help Bayhealth purchase products at the correct contract prices and reduce the labor required to check prices manually, the organization implemented GHX CCXpert, a contract management tool that helps maintain pricing accuracy through price validation, detailed historical purchasing reports and contract updates. When an order is placed, CCXpert performs a three-way price match across the purchase order (PO), purchase order acknowledgement (POA) and contract price to check that the right product is purchased at the right price.

Betts and her team load their group purchasing organization (GPO) and self-developed contracts (hybrid of GPO and local contracts) into CCXpert so it can serve as the organization’s single repository for all contracting data. CCXpert also feeds into the NuVia solution, providing Bayhealth with accurate contract pricing data within its item master, as well as the ability to conduct analytics and generate reports based on this data. Bayhealth’s use of the CCXpert solution in conjunction with NuVia has resulted in a 90 percent contract match rate.

“Prior to implementing these solutions, I assumed prices routinely changed, however, I didn’t have easy access to check that information,” said Betts. “Now we have visibility into contract changes; when items drop off contract, we can quickly reconnect them to a new contract. We track our contract match rate every month to ensure we maintain this improved level of accuracy.”

Betts also regularly provides buyers with reports showing how many times they have made a purchase at the wrong price or unit of measure, so they can identify and resolve issues for continuous improvement.

Results

Working with GHX, Bayhealth has achieved the following:

- Improved contract match rate by 84 percent (from 49 to 90 percent)
- Cut contract exceptions nearly in half (from 11.3 to 5.7 percent)
- Driven down part number exceptions by 42 percent (from 2.4 to 1.4 percent)
- Increased contracted lines by 50 percent (from 2,599 to 3,936 lines)