

Case Study

JumpStock™ Inventory Management: Chesapeake Regional Healthcare



Overview

As a unified family of providers, Chesapeake Regional Healthcare brings a broad range of care to the people of Southeast Virginia and Northeast North Carolina through Chesapeake Regional Medical Center and its affiliate services. A local, independent, community-focused organization, Chesapeake Regional Healthcare offers area residents what they want: high-quality, technologically advanced healthcare delivered by people who openly display their caring, concern and compassion.

Chesapeake Regional Healthcare is rolling out innovative technologies, state-of-the-art facilities, breakthrough clinical protocols, leading-edge information systems and powerful wellness initiatives, making patient care faster, safer and more effective. The result is better patient outcomes, higher satisfaction, more holistic treatment and fewer complications.

Their vision is to be the preferred, integrated healthcare delivery system, coordinating the provision of a full range of safe, high-quality, affordable and personalized healthcare services.

The Situation

Chesapeake Regional Healthcare is recognized for its primary focus on advancing patient care, while simultaneously improving its business processes in support of high-quality, cost-effective healthcare delivery.



Having recently implemented new Electronic Medical Records (EMR) and Enterprise Resource Planning (ERP) systems, Seth Larson, CMRP, Director, Supply

Chain Management, identified an area of need—tying product consumption to patient care in order to build a foundational understanding of cost, quality and outcomes.



Chesapeake Regional realized their need for a technology infrastructure so they might better understand supply usage in relation to cost and quality.

Specific to their inventory opportunities, Larson noted, “We experienced some typical par level issues with certain items that moved slower than expected and others that moved faster. We wanted good visibility of this so we could produce actionable reports – at a moment’s notice – that would show what’s being used in a unit and what’s not being used at all. We implemented the JumpStock solution in our cancer treatment center and we were able to do just this. In this small sample area, we reduced inventory by 70 percent and we identified items that had not moved at all.”

“In this small sample area, we reduced inventory by 70 percent and we identified some items that had not moved at all.” – Seth Larson, CMRP, Director, Supply Chain Management, Chesapeake Regional Healthcare

The Solution

Chesapeake Regional has worked together with Jump Technologies to implement an integrated solution that connects JumpStock Inventory Management with Chesapeake’s ADT (Admit, Discharge, Transfer) and Charge Capture Systems, as well as the new PeopleSoft ERP System. Implementation goals included: reducing costs through better supply management, providing more complete and accurate data about episodes of care to the cost accounting team, and improving the automation and accuracy of patient billing.

Products removed from inventory and used in patient care are now assigned directly to a patient using secure integration between the health

system’s HL7 interface capabilities—specifically the ADT and Charge Capture (Billing DFTs) messaging via a secure, real-time VPN tunnel between the health system’s network and the supply management solution. This technology partnership connects supply management with patient records and patient billing. As clinicians remove products from inventory, they select the specific patient’s name on a secure, smart, handheld device. This assigns the supply to the patient and automatically records it to the episode of care, allowing greater visibility to consumed supplies.

An accurate, aggregated view of supplies used throughout the system will help reduce costs through better supply management. Most importantly for Chesapeake Regional, tying products directly to patients will enable more transparent and accurate patient billing, ultimately helping to increase patient satisfaction. In addition, building better visibility to all consumed supplies will help support cost accounting efforts, build a longer-term view of financial and quality outcomes, and enable a more accurate understanding of cost of care.



Chesapeake Regional is building greater visibility to their supplies. Larson cited this example, “Because most of our supply areas have been managed with a par approach to inventory replenishment, the valuation of supplies in an area has always been a challenge. Now we can see the value of a par level

on a floor or for a specific area. For example, in Labor & Delivery, we have two operating rooms and approximately a dozen labor rooms; our on-hand inventory was at \$6400. Since implementing JumpStock, we've brought on-hand supplies down to \$3800, a 40 percent reduction. Now we can get daily use and dollar value by unit, and when we tie supplies to patients and episodes of care for a more accurate understanding of cost."

Objectives

Chesapeake Regional's main objective was to track products consumed at the specific patient level throughout an inpatient stay in order to:

- Help build a greater understanding of the cost of care, even in areas where bundled payments occur
- Help provide patients with greater transparency and accurate billings
- Support efforts to better understand cost, quality and outcomes

"Our goal is to capture as many items used in patient care as possible," said Seth Larson. "We're quickly and simply scanning barcodes, attaching that information to the specific patient and episode of care. We're keeping this simple for clinicians so they can stay focused on delivering care, not on cost accounting. From the patient's perspective, they're going to get a more detailed bill showing them everything that was used during their inpatient stay. They'll understand their bill more clearly, and in turn, I believe more transparency in billing can help build patient satisfaction."

"Clinicians can stay focused on delivering care, not on cost accounting. From the patient's perspective, they're going to get a more detailed bill showing them everything that was used during their inpatient stay." – Seth Larson

Implementation and Training

"We completed the implementations of both our new EMR and ERP systems, and then we went live on JumpStock," said Larson. "While I don't necessarily recommend taking on this number of system implementations all at once, we made it through and now have live data flowing between the systems. We're capturing supplies at the point of use in several areas, and based on our current plans, we should have JumpStock live for inventory management in up to 20 areas in the next few months."

"Initial training has included both the nurses and supply chain team members. The nurses are scanning products they're using and attaching them to the individual patient and episode of care. This is quick and easy barcode scanning for the nurses; it's allowing us to feed this data into our cost accounting team and patient billing systems. It's helping us build more accurate views of procedure costs, as well as create more transparency in patient billing."

Results

Chesapeake Regional Healthcare is seeing results that include:

- **Business process improvements** based on higher levels of automation, which eliminate manual, error-prone processes
- **Improved accuracy in patient billing**, helping improve patient satisfaction through transparency in billing and in turn, helping drive patient revenue
- **Improved inventory management using real-time velocity data**, reducing costs by helping eliminate overstocking, stock-outs, hoarding, maverick spending and waste
- **Better visibility to all supplies consumed**, reducing costs by accurately setting inventory levels; building a greater

understanding of supply use for cost accounting

“Since implementing JumpStock we’ve seen significant reductions in on-hand inventory because we can manage par levels accurately. In one nursing unit, we reduced the inventory from \$9438 to \$3390 in four months – a 64 percent reduction. In another, we reduced inventory from \$8094 to \$2691, a 66 percent reduction.” – Seth Larson

Larson added “For nearly six months, we’ve been generating patient charges in two areas—our cancer treatment center and Labor & Delivery. We’ve started in a new area—antepartum—and the charging process is working well. Capturing all products at point of use will help accounting get to a better understanding of episodes of care and getting to a more exact cost can only help us.”

“We’ve found that data is essential. The data has to be accurate in every system. We’ve had a few challenges with our ERP system supporting different units of measure (UOM) as products are procured, but then used in different UOMs, such as boxes versus eaches. Working to standardize has been a big project, and doing everything we can to ensure data integrity has been the most important lesson.”

“What I like most is that, when I think of something, JumpTech can usually help me try it. With JumpStock being a cloud-based solution, I’m continually getting updates and enhancements to the software so that we can keep improving.” – Seth Larson

In Summary

“At the highest level, the expected outcome is a uniquely visible, cost-effective supply chain,” said Larson. “While that sounds lofty, it actually won’t take that long to get there. We want something very visible, not just to the supply chain team, but also to end users, especially the nursing units. For example, I want them to see velocity reports for the items they request. There’s a lot of information we can now provide.”

“We’re looking at areas where we can expand the use of JumpStock. Right now, we’re looking at the OR and planning to enter the commodity supplies that aren’t usually covered by preference cards—like shoe covers, hair nets, and other items—into the system, so that we can start building visibility and understanding velocity. We’re also planning to implement a 2Bin approach to inventory management in some areas, likely starting with the ER. The good news is, we have all the data to do it.”

“What I like most is that, when I think of something, JumpTech can usually help me try it. With JumpStock being a cloud-based solution, I’m continually getting updates and enhancements to the software so that we can keep improving.”

Jump Technologies, Inc.

2600 Eagan Woods Drive, Suite 350, Eagan, MN 55121

888-373-7226 • jumptechnologies.com

