

EXECUTIVE BRIEFING

Turning Medication Management into Enterprise Performance

The next opportunity for improvement may reside in your existing medication management environment.

Health systems have invested for years in technologies that are designed to support medication management across pharmacy, nursing, and the point of care. Those investments help solve important problems.

As systems grow across facilities, departments, and care settings, organizations should consider what more the existing medication management environment could deliver if its workflows, information, and operational decisions were considered holistically.

This moves attention away from whether individual technologies are performing their intended functions and is meant to discover what medication management may contribute to workforce capacity, medication availability, inventory performance, clinical workflows, and the use of enterprise resources. For organizations with a strong foundation in place, the most productive place to look is often within the environment they already have.

> The potential value of connectivity is what the enterprise can do with existing data.

Start With the Work

Enterprise performance can sound abstract. In medication management, much of it starts with ordinary work. A nurse retrieves a medication. A pharmacist responds to a request, a technician replenishes a cabinet, and a buyer adjusts inventory. Somewhere, someone is looking for a drug that is not where it should be. None of this is remarkable on its own. Repeated across thousands of medications, clinicians, shifts, and locations, it can add up quickly.

A 2024 time-and-motion study[1] examined nursing medication rounds before and after automated dispensing cabinet implementation across four clinical specialties. The average number of locations nurses visited to obtain medications fell significantly from 1.73 to 1.04. On the surgical ward, mean medication retrieval time fell from 98.1 seconds to 47.2 seconds. Across all four specialties, however, the overall reduction in retrieval time was not statistically significant.

> The mixed result is interesting in that installing technology can change the conditions but doesn't necessarily determine whether the workflow itself improves.

Results may depend on the processes around it: where medication is located, how inventory is managed, how information moves, which manual steps remain, and how much time people spend working around friction.

Find Friction That Repeats

Some of the largest potential operational opportunities in medication management may be easy to overlook because they happen every day. A stockout triggers a request. A poorly calibrated par level creates replenishment work, and inventory held in the wrong place must be moved. Manual processes absorb pharmacy time. And, with limited visibility, it may be hard to tell whether a local problem is isolated or appearing across several facilities.

Small sources of friction can become enterprise issues when they repeat at scale.

At North Kansas City Hospital, the medication management foundation was already in place. The hospital was using Omnicell automated dispensing cabinets, anesthesia workstations, and pharmacy carousels, yet pharmacy leaders still identified manual inventory processes, stockouts, and medication requests as continuing sources of inefficiency.

After adding Omnicell's Inventory Optimization Service, the hospital eliminated approximately 1,200 medication requests, reduced stockouts by approximately 10%, and increased nursing satisfaction by 7% over a period of four months. The hospital was also able to increase the number of medications administered within 60 minutes by approximately 21,000 doses.

The existing foundation stayed in place. The hospital added a capability aimed at the problems its pharmacy leaders had already identified.[2]



Treat Workforce Capacity as a Design Problem

When pharmacy teams are working with scarce technician capacity, asking the same people to work harder and faster has limitations. It's worth doing the exercise of clearly separating the tasks that need skilled human attention from those that exist because of how the medication management process was designed.

At Owensboro Health, pharmacy leaders faced scarce technician labor while existing automation approached end of life. Nursing workflow, medication safety, scalability, and pharmacy workload were among the requirements used to evaluate the future medication distribution model.

Following implementation of Omnicell's Central Pharmacy Dispensing Service and XR2 Automated Central Pharmacy System, Owensboro automated up to 95% of cart fill and up to 50% of automated dispensing cabinet fill, while cutting manual picks by more than half. Unit-dose repackaging staffing was reduced by 90%, and night shift technicians were reassigned to higher-value activities including IV preparation, medication reconciliation, and medication delivery.

For a constrained pharmacy team, often productivity is largely a question of where skilled time goes, and that is something leaders can design.[3]

> The detail worth noticing is that people were available to do different work.

Use Visibility to Manage Beyond the Facility

For a large health system, local optimization may have limits. Medication inventory may be distributed across hospitals, pharmacies, clinics, and other care environments. When each location is managed largely through its own information and processes, leaders can find it difficult to see how medications are being used across the wider organization.

Where is inventory sitting unused? Where do shortages keep recurring? Are par levels aligned with actual demand? Could medication be located elsewhere in the system before more is purchased? Are different facilities solving the same operational problem in different ways?

Saint Luke's Health System confronted this issue across a network of 16 hospitals and campuses. Omnicell's case study describes departments working in silos, inconsistent practices and limited real-time inventory visibility. Following implementation of Omnicell Inventory Optimization Service, the health system reported a 12% systemwide reduction in drug inventory, reduced expired medications, and a $20,000-per-month reduction in drug waste.[4]

> Visibility at that scale is more than a reporting improvement. Visibility should let leaders manage medication resources across organizational boundaries, instead of one cabinet, pharmacy, or facility at a time.

Connect Operational Improvement to Financial Value

Medication management typically competes for investment with other enterprise priorities, and that raises the standard of proof. A clinical or operational problem can demand attention. A larger expansion investment increasingly needs a clear account of what the organization expects to improve and how improvement will be measured and recognized.

Baptist Health Alabama was managing medication inventory across three acute-care hospitals. Its challenges included limited visibility, shortages, overstock, expired medications, and siloed practices between facilities.

After implementing Omnicell Inventory Optimization Service, Baptist Health realized nearly $425,000 in medication inventory savings in less than three months. On-hand inventory was reduced by approximately $800,000, days on hand fell by 39%, and inventory turns increased by 59%.[5]

> Those results belong to Baptist Health and shouldn't be treated as a forecast for another health system. However, they do demonstrate the potential of how far medication-management decisions reach. Choices about inventory, workflow and automation can have consequences for both clinical operations and the use of capital, which is why they belong in a broader enterprise conversation.

Expand the Performance Conversation Before Expanding the Technology

Expansion should start with an examination of performance; the product comes later. Where is skilled time being consumed unnecessarily? Where does medication availability create avoidable work? Where is inventory difficult to see across facilities? Where does local variation serve a genuine clinical need, and where has it simply accumulated? Which existing investments are performing well but could contribute more if they were connected to additional capabilities or information?

The existing environment is often the most practical place to look for potential value that has not yet been realized.

These are the types of questions that can help prevent expansion from turning into a series of separate purchasing decisions. Once the problems are evidenced, the organization can work out which combination of workflow change, automation, intelligence, services, or additional technology is appropriate, instead of starting with a solution and working backward.

For an existing Omnicell customer, the installed environment is where that work begins. It has to be maintained, but the existing environment is often the most practical place to look for potential value that has not yet been realized.



Measure What Technology Changes

If the objective is enterprise performance, deployment is only the starting point. Knowing what was purchased and installed may say little about whether anything that mattered has changed. The right measures will depend on the problem being addressed.

THEY MIGHT INCLUDE:

- Medication requests and stockouts
- Medication availability
- Inventory levels, turns and waste
- Manual picks and replenishment activity
- Workflow steps or retrieval activity
- Nursing and pharmacy experience
- Skilled time redirected to other work
- Variation across facilities
- Operational or financial outcomes

> The important step that comes before the investment is deciding what better performance should look like in practice and how it will be measured.

Agreeing on that in advance helps tie the intervention to the business problem it was meant to solve. It also means clinical, operational, and executive stakeholders are judging value against the same standard.

From Existing Technology to Enterprise Value

For health systems with established medication management technology, the next phase of value may not require starting again. The first place to look is across what is already there. That means finding workflows that can be simplified, manual work that can be removed, and gaps in medication availability or inventory visibility. It also means discovering how existing technology could work as part of a more coordinated medication management environment.

Omnicell's portfolio spans point of care and central pharmacy automation, inventory capabilities, software, and services. Its broader platform strategy is intended to connect medication management capabilities and information across the enterprise.

> For an established customer, focus should be on where the medication management environment that's already built can work harder for the organization.



Questions Worth Discussing

- Where is the current medication management environment creating unnecessary work for pharmacy or nursing?
- Which recurring operational problems are large enough at enterprise scale to justify intervention?
- Where could better medication availability or inventory visibility improve performance?
- Which processes should be more consistent across facilities, and where is local variation important?
- Where could existing Omnicell investments support additional capabilities rather than another isolated technology decision?
- What measures would demonstrate that an expansion investment created meaningful clinical, operational, or financial value?

Contact your Omnicell representative to discuss how you can create an enterprise medication management operating model for your organization.

About Omnicell

Omnicell helps health systems to create more connected medication management environments through enterprise visibility, interoperable cloud technology, standardized workflows, and operational intelligence.

SOURCES:

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3. OMNICELL CUSTOMER EVIDENCE - OWENSBORO HEALTH Omnicell-published customer case study. Customer-specific results only. Results are not guaranteed and may vary. The case study reports automation of up to 95% of cart fill and up to 50% of ADC fill, a reduction of more than 50% in manual picks and a 90% reduction in unit-dose repackaging staffing. Night-shift technicians were reallocated to other pharmacy activities. Results may vary. https://www.omnicell.com/resources/case-study/owensboro-health-pharmacy-innovations-increase-safety-and-reallocate-scarce-labor/
4. OMNICELL CUSTOMER EVIDENCE - SAINT LUKE'S HEALTH SYSTEM Omnicell-published customer case study. Customer-specific results only. Results are not guaranteed and may vary. Omnicell reports a 12% systemwide reduction in drug inventory, reduced expired medications and a $20,000-per-month reduction in drug waste. https://www.omnicell.com/resources/case-study/saint-lukes-improves-inventory-management-and-visibility-with-intelligence-solutions/
5. OMNICELL CUSTOMER EVIDENCE - BAPTIST HEALTH ALABAMA Omnicell-published customer case study. Customer-specific results only. Results are not guaranteed and may vary. https://www.omnicell.com/resources/case-study/intelligent-inventory-solutions-lead-to-%24425k-savings-at-baptist-health-alabama/

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