Revolutionize Your Central Pharmacy Operations with New Omnicell Automation

Introducing the XR2 Automated Central Pharmacy System

Is it challenging to find time to focus on clinical initiatives such as transitions of care?

Many pharmacies are eager to contribute to clinical care but are bogged down with inventory distribution tasks. To address this challenge, Omnicell developed the new XR2 Automated Central Pharmacy System, which made its debut at the ASHP meeting in December.

The Omnicell XR2 system more fully automates medication inventory management, allowing pharmacies to make a meaningful shift from operational demands to clinical activities that impact patient outcomes. Designed with input from leading health system pharmacies, the XR2 system uses robotic technology to eliminate numerous manual tasks, freeing up time for top of license work.

“With XR2, we can reallocate resources to support population health initiatives,” said Glenn Huth, RPh, Director of Pharmacy Operations at Summa Health. “Rather than focusing on medication inventory work in the pharmacy, our staff can get out on the floor to interact with nurses, physicians, and patients from the point of admission to discharge, which will help lead to improved patient outcomes.” Continued on next page >
The XR2 system supports health systems with either centralized or decentralized pharmacy models, with or without existing pharmacy automation. The extremely configurable and scalable architecture can easily be tailored to meet your needs, fit your space, and expand as you grow.

One of our first XR2 customers, Barberton hospital, part of Summa Health, uses a hybrid model in the hospital, but some of its off-site locations exclusively use cabinets.

**Novel Approach to Inventory Management**

Slow-moving inventory is a challenge for traditional pharmacy automation. Not only does it make up a high percentage of inventory value, but slow movers also present a safety risk, since they are handled infrequently. The unique storage design of the XR2 system enables slow movers to be managed as efficiently as fast movers, allowing you to maintain accurate inventory control and minimize discrepancies.

**Safety, Efficiency, and Cost Benefits**

Hospital systems can benefit from these advantages of the XR2 system:

- One-touch design that reduces handling of medications by technicians and pharmacists
- Advanced algorithms that ensure earliest expiring medications are picked first, reducing medication waste
- 100% barcode scanning that eliminates human error
- Ability to support 90% of non-IV and non-narcotic formulary in a variety of form factors: individual blisters, blister cards, vials, cups, packets, syringes, and others
- Does not require repackaging, saving time and expense
- Stores 200% to 300% more doses compared with conventional pharmacy robots of similar size

In addition, the potential for pharmacist verification exemption can further reduce staff burden.

**Learn More**

Visit the [XR2 Automated Central Pharmacy System web page](http://example.com) and view this [video](http://example.com) to see it in action.
Dispensing Alerts

Using dispensing alerts with Omnicell® Automated Dispensing Cabinets is a useful way to remind nurses about special procedures required for transdermal patches. For example, upon removing a patch from the cabinet, an alert can remind the nurse to check the patient for an existing patch before applying a new one. Alerts can also be used to provide specific waste instructions, as shown on the next page.

Customized Waste Reasons

To facilitate the waste process, Omnicell enabled customized waste reasons such as “Trace” to be set up in the OmniCenter® server, starting with software version 17.1 (current version is 22.0).

Two Approaches for Documenting Waste

The Omnicell cabinet can be set up to record waste in two ways:

1) by number of hours the patch was in place, or
2) by indicating a zero waste amount.

Following are the step-by-step processes for these approaches based on a 50 mcg/hour/72 hour fentanyl patch that was discontinued after 24 hours. Note that these are examples only. Pharmacy and nursing should work together to develop medication processes that best meet the needs of the hospital and work with the pharmacy information system.

While these examples are based on Omnicell Automated Dispensing Cabinets (G4 or XT), the process is similar with AcuDose-Rx® cabinets.

Continued on next page >
Two Approaches for Wasting Via the Cabinet

**Approach 1:**
**Documenting Waste by Hours**

### Fentanyl 50MCG 72HOUR PATCH

**Item Setup**
- Description: Fentanyl 50 mcg
- Strength Amount: 72
- Strength Unit: Hour
- Select Reconcile Dose
- Select Multi-Day Admin so the item is not closed after 24 hours

**Dispensing Alert Example**
- Administration Amount: Enter # of hours patch has been in use.
- Waste Amount: Subtract hours in use from 72. Enter result.

**Document Waste**
- Select Waste Meds
- Select the fentanyl patch
- Enter the information as shown above
- Have a witness verify the waste, and then record it

**Approach 2:**
**Documenting Zero Waste Amount**

### Fentanyl 50MCG 1PATCH

**Item Setup**
- Description: Fentanyl 50 mcg
- Strength Amount: 1
- Strength Unit: Patch
- Select Reconcile Dose
- Select Multi-Day Admin so the item is not closed after 24 hours

**Dispensing Alert Example**
- Administration Amount: Enter 1 (indicating one patch)
- Waste Amount: Enter zero
- Waste Reason: trace
- Enter appropriate term such as "trace"

**Document Waste**
- Select Waste Meds
- Select the fentanyl patch
- Enter the information as shown above
- Have a witness verify the waste, and then record it

**Disposing of the Patch**
After placing the used patch in a baggie, follow your hospital policy for safe disposal to ensure the patch cannot be retrieved by others. Overdoses have occurred when wasted patches have been misused.
New Controlled Substance Management Option for AcuDose-Rx Automated Dispensing Cabinets

Improve Accountability of Controlled Substances

Our customers often struggle with managing controlled substances throughout the healthcare facility, resulting in missing controlled substances, potential drug diversion, and regulatory compliance issues. The XT Controlled Substance Manager from Omnicell supports the daily challenges of managing narcotics by automating manual processes via up-to-date technology and a user-friendly interface.

XT Controlled Substance Manager is now available for AcuDose-Rx* Automated Dispensing Cabinets, providing a closed-loop restocking process. The system includes a workstation and cabinet for securing controlled substances in the central pharmacy.

Integrated Systems Offer Closed-Loop Functionality

Available with our latest OmniCenter® server software release 22.0 and Connect-Rx® software release 8.5.7, this new solution offers a better way to manage controlled substances without having to replace your AcuDose-Rx cabinet infrastructure.

In addition to integrating with AcuDose-Rx cabinets, the XT Controlled Substance Manager also provides closed-loop restocking for the Omnicell® Anesthesia Workstation™, a market-leading solution for managing and securing medications and supplies in the operating room.

Pathway to Unity Platform

This controlled substance solution for AcuDose-Rx environments establishes a transition to Omnicell’s Unity enterprise platform, enabling you to add other OmniCenter-based systems in a way that fits your timeline and budget.

Closed-Loop Restocking Process with Controlled Substance Manager (CSM)

AcuDose-Rx is below reorder point on controlled substances and notifies CSM of the need.

Pharmacy dispenses medications for cabinet replenishment.

CSM notifies AcuDose-Rx of the quantity to expect.

Restock orders arrive in the CSM restocking queue.

Pharmacy transports and restocks the AcuDose-Rx cabinet.

AcuDose-Rx notifies CSM of the restocked quantities.

Order is closed out if quantities match. Exceptions are created if there is not a match.

Pharmacy transports and restocks the AcuDose-Rx cabinet.

XT Controlled Substance Manager cabinets are available with glass or steel doors.

Learn More

To learn more about improving controlled substance management with your AcuDose-Rx Automated Dispensing Cabinets, contact your Omnicell representative and download our brochure.
Supply Systems Help Keep Army Medical Center Running Smoothly

If your health system is looking to improve overall supply chain operations, you will be inspired by the experience of Madigan Army Medical Center, just south of Seattle. Madigan Army Medical Center was Omnicell’s flagship Department of Defense Medical Center site in 1999, when they installed an Omnicell automated supply dispensing system. Like many long-term Omnicell customers, the medical center continues to use Omnicell supply automation to track supplies better, reduce inventory, and ultimately save money.

**Built By Nursing, For Nursing**

Glenn Space, the Point of Use System Administrator at Madigan, has been the lead for supply automation since they first partnered with Omnicell. According to Space, the decision to install the supply cabinets was made at headquarters by the Army Medical Command and Office of the Surgeon General. “We were given the Omnicell system and told to make it work,” he said.

Space took an active role to ensure success of the project. Working closely with Omnicell representatives throughout the implementation, he developed his own user training materials and quickly became a fan of Omnicell dispensing systems. He recognized that involving nurses, who are the primary users of the system, would be important to a successful implementation. Space ensured that nurses were integrally involved in determining how supplies would be arranged in the cabinets.

**Improved Inventory Management**

Other Omnicell customers use automated supply systems in part to improve charge capture and billing consistency. Since Madigan, like many international healthcare facilities, does not bill patients, the biggest advantage they gain from using Omnicell supply cabinets is the ability to maintain, secure, and automatically reorder medical supplies. With tighter control over inventory, healthcare facilities can help ensure supplies are available when and where clinical staff needs them, promoting better clinical care.

Madigan primarily uses a closed supply system with some large items like crutches stored on open shelving. Many Omnicell supply customers use a similar hybrid system, where items stored outside the cabinet can easily be decremented via the Omnicell supply software.

Over the years, the Omnicell-Madigan partnership has grown, and Madigan now uses Omnicell medication and supply systems in many areas, with some cabinets containing both medications and supplies. The medical center recently installed Omnicell cabinets in a traumatic brain injury facility that serves wounded veterans.

**Omnicell Point-of-Use Supply Systems**

Omnicell offers a variety of systems for managing supplies on open shelves and secure automated dispensing cabinets—or both. Our latest Omnicell XT Automated Supply Dispensing Cabinets run on Windows 10 and include new accessories that offer additional flexibility and greater storage capacity.

Visit the supply section of our website or contact your Omnicell representative to learn more.
Community Pharmacy Meets Health System: Hybrid Practice Is a Growing Trend

Every hospital needs an outpatient pharmacy located within its facility according to a recent *Pharmacy Times* article written by Alex Evans, PharmD, CGP, a community pharmacist practicing within a health system in Jacksonville, Florida.\(^1\) Evans believes the extent to which outpatient pharmacies within hospitals can improve quality, reduce healthcare costs, and increase health system profitability is often underappreciated.

Avoiding Preventable Readmissions and Improving Patient Satisfaction

Readmission rates and patient satisfaction scores via the standardized HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) survey are indicators of quality and provide incentives for quality improvement, since excessive readmissions result in financial penalties, and patient satisfaction scores are publicly reported. The goal of the hospital is to help patients to recover, be discharged, transition to home or other facility, and avoid readmission. The pharmacy can have a significant impact in lowering readmission rates and improving patient satisfaction.

25% of Patients Are Being Discharged Without Picking Up Their Meds

Evans notes that, among the several reasons that patients do not bring their meds home, most can be addressed prior to discharge. For example, his outpatient pharmacy implemented a Meds to Beds program, whereby the pharmacy furnishes patients’ discharge medications to the bedside and reviews them with patients, answering any questions they may have. They also offer discounted medication coupons and work with insurance companies to resolve coverage issues.

Additionally, Evans and his staff offer a medical supply program that includes delivery to the patient’s hospital room, a program to reduce co-prescribing of benzodiazepines and opioids, and a program to help uninsured patients obtain needed medications and/or referrals to appropriate community clinics and other resources.

In summary, Evans feels that an outpatient pharmacy within a health system can play a strong role in improving quality, reducing readmissions, and increasing patient satisfaction. Tracy W. Becker, PharmD, MBA, divisional vice president for a national provider of hospital pharmacy management and consulting services, agrees, stating, “As we make this transition from inpatient-centered care to an emphasis on outpatient care, and from episodic care to population health management, sooner or later every health system is going to need a retail outpatient pharmacy strategy.”\(^2\)

Omnicell Outpatient Pharmacy Solutions

Omnicell offers a comprehensive suite of solutions to support any hospital’s retail outpatient pharmacy strategy. Our portfolio includes patient engagement solutions such as medication synchronization, multimed adherence packaging, and packaging automation. Our SureMed® by Omnicell® Multimed Blister Cards are an ideal complement for Meds to Beds programs because they provide an easier way for patients leaving the hospital to adhere to complex medication regimens.

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In the recently released yearly Best in KLAS report, Omnicell was once again recognized as a leader by KLAS, an independent healthcare research firm that uses ratings from thousands of healthcare professionals to determine top-performing vendors.

**Best in KLAS**

This marks the 8th year in a row that Omnicell has received the Best in KLAS award for Automated Dispensing Cabinets and 12th consecutive year we’ve been recognized as the top vendor in this category. The Best in KLAS designation is reserved for vendor solutions that lead the software and services market segment with the broadest operational and clinical impact on healthcare organizations.

**Category Leader**

The Omnicell WorkflowRx™ Carousel received the Category Leader distinction for the 8th year for Medication Carousels. This is the highest KLAS award given in this market segment.

In addition, Omnicell’s i.v.STATION™ Non-hazardous Compounding Robot was awarded Most Improved Medical Equipment Product due to higher levels of support and implementation resources.

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Many hospitals are leveraging Simplifi 797®, the market-leading quality management and USP <797> compliance software from Wolters Kluwer, to simplify, streamline, and automate compliance processes and cleanroom operations. Did you know this software can be integrated with IVX Workflow, Omnicell’s latest IV compounding solution?

Simplifi 797 is a turnkey web-based quality management system that simplifies and automates ongoing compliance with essential USP Chapter 797 and USP Chapter 800 requirements for safety and risk mitigation—including comprehensive policies, procedures, staff training, competency evaluations, risk management, and quality assurance practices necessary for a safe and efficient sterile compounding environment.

Subscribers to the integrated solution will have direct access to Simplifi 797 through the IVX Cloud dashboard, and a new Simplifi 797 module will incorporate IVX Workflow-specific compliance tools, policies and procedures, and competency evaluations.

Together, IVX Workflow and Simplifi 797 provide hospitals and health systems with a robust solution to address the critical needs of sterile compounding, quality management, and compliance.
New Training Facilities Open in Cranberry Township

Omnicell's new state-of-the-art Customer Training Center will be opening on March 2 in our Cranberry Township facility near Pittsburgh, Pennsylvania. The new training facility will complement the recently renovated Customer Briefing Center in the same location.

The Cranberry Township Customer Training Center will offer:

• Classrooms for Pharmacy and Supply System Administrators, Anesthesia-Rx, Carousel, and AcuDose-Rx training courses
• Hardware classroom with equipment to support Biomedical Services training for G4 and XT Automated Dispensing Cabinets
• Lab with 25 cabinets for hands-on practice
• New refreshment center and customer dining room

The Customer Briefing Center offers a collaborative environment to meet with Omnicell experts and learn about the newest technological and system approaches to solving patient medication challenges.

New Pharmacy Robotics Resource Center

The use of robotic technology is increasing in many industries, and healthcare is no exception. Robotics has been defined as “mechanical devices that perform programmed, complex, and repetitive manipulations which mimic human behavior without continuous input from an operator.”

As a leading innovator in the area of pharmacy automation, Omnicell realized that little non-commercial information is available on pharmacy robotics. That spurred Omnicell’s Robotics Center of Excellence to launch the Pharmacy Robotics Resource Center, a complimentary online educational service to promote the knowledge, understanding, and advancement of robotic automation for pharmacy.

We encourage you to visit the Pharmacy Robotics Resource Center website to gain background information and stay on top of the latest developments in this field.

Educational resources available through the website include:

• Links to ASHP materials on sterile IV compounding technology
• Chart listing factors for selecting and implementing robots
• Published articles about various pharmacy robotic systems
• Presentations from leading teaching hospitals

Relevant events are also listed, such as the recent American Society for Automation in Pharmacy (ASAP) meeting.

The site will be updated as new sources of information become available, so check back periodically.

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Retail pharmacies are increasingly adopting medication synchronization programs, which enable patients on multiple medications to pick up their refills on a single visit. While medication synchronization has been demonstrated to improve adherence, evidence directly linking med sync to reduced healthcare costs has been lacking. That is, until a recent study conducted by Harvard Medical School researchers was published in *Health Affairs*.\(^5\)

The study evaluated the impact of med sync programs at 1,100 Publix Super Markets and 100 Thrifty White Pharmacies. Publix uses Omnicell’s *Time My Meds*®

**Medication Synchronization solution.** Results of the study showed:

**Reduced healthcare utilization**—Patients enrolled in a medication synchronization program had 9% lower rates of hospitalization and emergency department visits than patients not enrolled in med sync.

**Improved adherence**—Synchronization was associated with improved adherence for patients with cardiovascular disease. The greatest impact was seen in patients with lower baseline adherence—adherence improvement was three times greater in these patients compared to those with higher baseline adherence.

**Additional Information**

The study involved 23,000 Medicare beneficiaries who were studied from 2011 to 2014. Patients included were treated for two or more chronic conditions, at least one of which was hypertension, diabetes, or hyperlipidemia.

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Visit the **Omnicell Booth 1629** at this year’s Healthcare Information and Management Systems Society (HIMSS) Conference to experience innovative solutions that improve operational and financial performance, and enhance quality of care.

See our XT Automated Medication Dispensing Cabinets, IV solutions, Performance Center, Omnicell Analytics, and XR2—our newest automated central pharmacy system.

Omnicell’s Performance Center™ will be featured in the **Interoperability Showcase**, Booth 11955, in a demonstration use case titled Diabetes and Cardiovascular Risk Factors. Omnicell will partner with Epic, B Braun, Philips, and GuardRFID to show how our technology helps patients with multiple comorbidities move safely through the healthcare system.

Omnicell customers are also invited to attend our exclusive **HIMSS18 Reception and Panel Discussion** titled “Digital transformation using interoperability, machine learning, and predictive analytics in the healthcare environment with the impact on medication safety,” on March 6 from 6:00–8:00 p.m. at the Sands Convention Center.

Learn more and register here.

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**Conferences**

Omnicell participates in many conferences throughout the year. Some key meetings are listed below. We hope you can join us at an upcoming event!

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**Acute Care Events**

- **Federation of American Hospitals**
  - March 4–6, 2018
  - Washington, DC

- **Health Information and Management Systems Society (HIMSS) Conference & Exhibition**
  - March 5–9, 2018
  - Las Vegas, Nevada

- **European Association of Hospital Pharmacists (EAHP) Congress**
  - March 21–23, 2018
  - Gothenburg, Sweden

**Non-Acute Care Events**

- **American Organization of Nurse Executives (AONE) Annual Meeting**
  - April 12–15, 2018
  - Indianapolis, Indiana

- **American Pharmacists Association (APhA) Annual Meeting & Exposition**
  - March 16–19, 2018
  - Nashville, TN

- **SSN 2018 Medicare Advantage Leadership Innovations Forum**
  - April 10–11, 2018
  - Phoenix, AZ

- **National Association of Chain Drug Stores (NACDS) Annual Meeting**
  - April 22–25, 2018
  - Palm Beach, FL
Training

Listed below are some new training courses. Learn more and access/register for these courses via the training section of myOmnicell.com.

OmniCenter – Virtual Training Classes

OC210 – User Roles
Explore options for configuring User Roles and evaluate assignment of roles to users, review reporting capabilities regarding user maintenance, and discuss best practices for managing users.

Rx109 – Managing Users
Learn to manage users within OmniCenter® software. This interactive session is designed to give you the skills needed to begin using Active Directory to create and manage users, create a password strategy, set up user templates, and run reports that will help manage users within OmniCenter.

Rx112 – Managing Automated Dispensing Cabinets
Learn how to manage your Omnicell Automated Dispensing Cabinets. This course is designed to give you the skills needed to add a cabinet on the OmniCenter server, assign an area to a cabinet, establish communication between the cabinet and OmniCenter, and adjust cabinet configurations as needed.

Central Pharmacy Manager – Virtual Training Classes

CPM250 – Remote Ordering in Central Pharmacy Manager
Examine the opportunities for remote ordering and learn how to set up locations to utilize remote ordering, including building remote Omnis, adding items, and providing access.

Omnicell Analytics – E-Learning Courses

The following courses have been updated to reflect new functionality in software release 22.0.

22.0 Omnicell Analytics for Nursing
This module introduces Omnicell Analytics to nursing leaders and shows how it can support their diversion monitoring efforts. The data provides information on the individual user scores, scores in comparison to peers, and patterns that indicate potential diversion.

22.0 Omnicell Analytics for System Administrators
This module is designed for system administrators. It walks through adding users and assigning permissions for Omnicell Analytics users at their facility.

22.0 Omnicell Analytics for Pharmacy & Anesthesia
This interactive module highlights the different methods employed by diverters and how facilities can use Omnicell Analytics in their diversion monitoring efforts. The training also walks through how to read user scores, interpret data, and look for interesting patterns that indicate potential diversion.