



# Summa Health views multihospital filling with extensible XR2 Automated Central Pharmacy System

## Customer Profile

Summa Health is among Ohio's largest integrated health delivery systems. Based in Akron, Summa serves patients in comprehensive acute, critical, emergency, outpatient, and home care settings, with more than 1,300 licensed inpatient beds at its Akron, Barberton, and St. Thomas campuses.

## The Challenge

For years, Summa's three hospitals managed medications with automated dispensing cabinets and a decentralized distribution model.

While the Akron City campus was aided by the use of a central pharmacy carousel, the other two campuses stored and picked medications manually—a labor-intensive and error-prone process.

Seeking to redeploy staff to clinical tasks, pharmacy leaders formulated a vision to automate cart filling operations across all three hospitals.

Further, because the facilities are within a 15-mile radius, the pharmacy leaders envisioned centralizing automated medication filling in the Barberton campus and using health system couriers to distribute medications to other sites.



Summa Health (Akron, Ohio)

## The Solution

The Summa team's search led them to become an Omnicell development partner for the new XR2 Automated Central Pharmacy System. The XR2 system automates critical workflows to increase medication safety, improve efficiency, and maximize inventory control. Features include:

- 100% barcode scanning, eliminating human error
- Supports the hybrid model encompassing cart fill, cabinet fill, and first dose distribution
- Advanced algorithms to reduce waste and maintain accurate inventory

100%

barcode scanning  
eliminating human  
error

92%

reduction in  
dispensing errors\*

\*automated and  
non-automated picks

10%

spot check vs. 100%  
pharmacist check

## Immediate Impact

The XR2 system leverages barcoded manufacturer packaging to automate medication storage and retrieval. The system supports the vast majority of non-IV and non-narcotic formulary in a variety of form factors, including individual blisters, blister cards, vials, cups, packets, syringes, and others.

One of Summa's objectives for the XR2 system was to automate central pharmacy cart fill and first dose operations at the Barberton campus. Daily patient-specific picks average around 1,200. Each order is sealed in individual, clear, barcode labeled bags using XR2's unique Auto Packager system.

Brandon Singer, Barberton's Pharmacy Supervisor, said, "With the XR2 system, we saw an immediate reduction in documented cart fill mispicks. It's been a significant safety win."

Prior to the XR2 system, dispensing errors comprised 13.5% of all reported errors at the Barberton campus. Following XR2 implementation, the rate for all automated and non-automated picking errors fell to just 1.2%, with many months containing zero reported errors.

## Daily Cabinet Filling

Summa tested the XR2 system for daily filling of Barberton's unit-based cabinets.

The XR2 system receives the cabinet fill order, recognizes which items are stocked in the system, and begins filling the order on a per-cabinet, per-storage location basis. Orders are individually and barcode labeled. Technicians complete the cabinet fill for any items stocked offline. The items are then prepared for transport to the cabinets.

## Extensible Automation

Summa sought and received permission from the Ohio Board of Pharmacy for an hourly 10% spot check in lieu of a 100% pharmacist check for cart fill and first doses.

They also initiated plans to use the XR2 system for cart and cabinet filling for its other hospitals.

The pharmacy team continues to collect and evaluate data in order to improve inventory management and productivity, and further system expansion.

"The end game, of course, is to leverage the XR2 system to enable pharmacists and technicians to practice at the top of their licenses," explained System Director of Pharmacy Services John Feucht. "Automating the distributive processes enhances patient safety, improves efficiency, and creates inventory visibility for better management. And in the end, you have a much more gratified staff because they know they are making a positive clinical impact at the bedside for our patients."

"The XR2 system is a game changer when it comes to robotics because it has the flexibility to work with any pharmacy distribution model, and to fill for cabinets, cart fills, and first doses."

—John Feucht, System Director of Pharmacy Services

Learn more about the XR2 Automated Central Pharmacy System at [omnicell.com/XR2](https://omnicell.com/XR2).