



Allegheny General sees safety, efficiency, financial gains from IV robotic insourcing program

Customer Profile

Allegheny General Hospital (AGH) is a 650-bed academic medical center in Pittsburgh, and serves as the flagship facility for Allegheny Health Network, a non-profit, 13-hospital health network.

The Challenge

Like many health systems, Allegheny General Hospital supplemented internal compounding operations with pre-mixed compounded sterile products (CSPs) purchased from 503B suppliers.

When its primary 503B vendor went out of business, AGH switched to another 503B vendor. When that company also went out of business, the pharmacy struggled to keep up with demand. Shortages and waste issues hindered day-to-day operations and had the potential to negatively impact patient care.

The Solution

After a methodical review of technology solutions, pharmacy leaders established an insourcing program with the Omnicell Central Pharmacy IV Compounding Service. This turnkey solution enabled AGH to regain control of critical CSP production using the tools, technicians, and technology provided by Omnicell, including an i.v.STATION™ Non-hazardous Compounding Robot.

The insourcing program also instituted:

- Sterility testing
- Stability testing
- Operational best practices for CSP production, quarantine, and recordkeeping



Allegheny General Hospital

Pittsburgh, Pennsylvania

Challenge

- Unreliable 503B suppliers
- Limited in-house capabilities
- High medication costs

Solution

- Omnicell Central Pharmacy IV Compounding Service
- i.v.STATION Non-hazardous Compounding Robot

Impact

- Realized \$700K savings in first six months
- Automated approximately 30% of all non-chemo IV preps
- Enhanced medication safety
- Extended BUD (beyond-use dating)
- Standardized processes

Allegheny General Hospital CASE STUDY

The Impact

Within about a month, AGH's insourcing program was producing CSPs at full capacity, and providing clear benefits such as:

- Standardized sterility testing
- Greater control over CSP supply chain
- Improved operational efficiency
- Standardized CSP production and processes

\$700K Saved in 6 Months, Plus Safer Operations

The insourcing program quickly proved beneficial to AGH pharmacy and clinical teams. Clinical staff had a reliable supply of quality CSP products available in automated dispensing cabinets and anesthesia carts to use when needed. No longer were operational challenges with CSP availability dictating or delaying clinical decisions.

Further, within six months of switching from 503B suppliers to the insourcing program, AGH produced approximately 25,000 bags and syringes, saving nearly \$700,000. They also experienced less medication waste through enhanced beyond-use-dating (BUD) processes.

Building on Success, Standardizing on Performance

Spurred by the success of its insourcing program, AGH pharmacy leaders have expanded it by:

- Adding a second non-hazardous IV compounding robot at AGH to double production to about 100,000 bags and syringes per year, while increasing savings to about \$2 million.
- Introducing IV workflow automation to each hospital in the health system to enhance accuracy, improve quality, and reduce waste.
- Standardizing all compounding processes, BUD procedures, and documentation procedures to aid in data collection and performance measurements.

- "The experience has been amazing. It really helped us focus, prioritize, and have technicians dedicated to the robot. They know the robot inside and out. They know the capacity, they can push the capacity to the limits. It's helped us really expand the program."
- If you don't measure, you don't know. That's the challenge with manual compounding. There's no way to measure accuracy. With our automated solutions, each prep is measured with gravimetric/volumetric verification. It gives us 100% confidence that everything compounded by the robot is accurate."
 - Arpit Mehta
 Director of Pharmacy



