# Cohen Children's Medical Center

Streamlined Pharmacy Operations with the BoxPicker® Automated Pharmacy Storage System to Drive Efficient Medication Management.



Cohen Children's Medical Center is a member of Northwell Health System. Located in Queens, NY, the 202-bed hospital specializes in serving children from prematurity to adolescence, approximately 1.8 million in the Brooklyn, Queens, Nassau and Suffolk county areas. Recognized for excellence by U.S. News & World Report for thirteen consecutive years, Cohen Children's is on the publication's 2018-19 Best Children's Hospitals list where it earned top 50 placement in nine specialty areas.

Cohen Children's partnered with Swisslog Healthcare to automate medication management by deploying BoxPicker. The labor-saving solution helps skilled staff realize more time to allocate to patient-critical, clinical tasks.

### THE CHALLENGE

In the past, Cohen Children's Hospital stored pharmacy inventory in multiple locations throughout the facility, including several satellite pharmacies and inventory rooms situated in various department areas. The pharmacy staff was required to routinely walk throughout the hospital to these locations to carry out inventory and stocking tasks. This was logistically challenging, causing inefficient and time-consuming workflows.

Within these satellite locations, medication was stored and managed on static shelving. This method was highly susceptible to human errors including inaccuracy in labeling bins, mis-identification of medication during manual pulls





The inventory management, ordering and restocking process at Cohen Children's Hospital used to take three people a full day to complete. With BoxPicker on site, one person spends one hour a day on ordering and less than one hour a day restocking the unit."

and returns, and mispicks. Inventory counts were done by hand each day. These handwritten counts and subjective opinions were used to place medication orders with wholesalers.

This high-touch process required constant management and presented opportunities for miscounts, which in turn led to instances of over and underordering from wholesalers. Pharmacy leadership sought to minimize inventory shrinkage, gain visibility into medication stocking and reduce the volume of expired medications. This highly manual workflow also led to medication stockouts, increasing the risk of delayed patient care.

#### THE SOLUTION

When reviewing their operations, hospital administrators recognized the need for a medication storage and retrieval system capable of streamlining medication administration workflow to improve efficiency and patient safety.

As plans emerged for the hospital to construct a new facility, a priority was placed on consolidating pharmacy operations. The BoxPicker Automated Pharmacy Storage System from Swisslog Healthcare was chosen to be the cornerstone in Cohen Children's new inventory workflow. Administration was highly interested in the flexible, scalable nature of the solution, the opportunity to improve patient safety through secure scan in/scan out access and overall time-saving potential.

A five-module, three-operator station, 10-foot dual- temperature BoxPicker was selected to replace their previously manual process. Inventory was moved from these satellite locations to be securely located and managed for pharmacy workflows.

### IMPLEMENTATION

At the time of implementation, Swisslog Healthcare's Project Management Team worked closely with the Pharmacy staff to ensure a smooth transition to using the new technology in their space. The dedicated trainers used a hands-on approach onsite to train "super-users" on the machines, followed with a trainthe-trainer model so that the whole staff felt confident in the change.





Before implementing a central pharmacy model with BoxPicker, the medication storage, inventory, and ordering processes were chaotic and inefficient. Technicians had to conduct manual checks of bins and trays and counts, all very laborintensive. The BoxPicker makes it all faster and those techs can now do more rewarding work."

> Wazeem Mohammed, RPh, MHA Coordinator, Inventory Management and Finance ~ Cohen Children's Medical Center

### MEASURES OF SUCCESS

Pharmacy management reports previously experiencing medication picking errors and issues with manual, labor-intensive medication dispense. Following implementation of BoxPicker, they have realized a greater than 50% reduction in picking errors, a greater than 30% reduction in labor and a greater than 30% increase in time saved.

BoxPicker allows Cohen Children's Hospital to streamline medication ordering. Fewer numbers of personnel are needed to complete the process now, whereas previously three pharmacy technicians were dedicated to inventory control and ordering.

Now a single reorder list is generated by BoxPicker based on PAR levels and medication usage, enabling pharmacy staff to quickly, accurately place orders before moving on to more rewarding duties. The first inventory review following implementation of the BoxPicker identified a 30% decrease in total value of inventory on hand.

#### ONGOING SUPPORT

Swisslog Healthcare provides ongoing support for Cohen Children's through the Field Service Technician, who spends time onsite. They are a local resource that act as an extension of the pharmacy team, learning the workflows and keeping the machine running optimally.

The Customer Success Manager serves as an internal advocate, helping Cohen Children's to navigate the Swisslog Healthcare organization as well as ensure ongoing system optimization.

#### CONCLUSION

With the goal to minimize manual labor processes to improve efficiency and patient safety, Cohen Children's Medical Center has found success through optimizing their pharmacy operations using the BoxPicker.



### MEDICATION PICKING WITH THE BOXPICKER AUTOMATED PHARMACY STORAGE SYSTEM

BoxPicker is a robotic, goods-to-person picking system that supports safe, accurate medication dispensing.



- A user logs into the operator station and selects an order to dispense. The option for multiple workstations enables one user to be picking while another is loading.
- BoxPicker picks only the correct medication box and places it in an access drawer at the operator station.



The user picks the correct medication from the box and scans the product barcode for verification. BoxPicker supports 100% scan-in/scan-out of medications.

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Once the box arrives, a green light indicates the drawer is unlocked and can be opened. Only one drawer can be accessed at a time.



5. Once the medication has been scanned and confirmed, a label is produced and the inventory quantity is updated in the system.



6. While the technician scans one product out, BoxPicker is already retrieving the next medication box to be dispensed, picking up to three orders ahead of the user.

