

Case Study



JFK Medical Center's Packager Sets Bar Code Foundation Returns Cost, Labor Savings

At a Glance

JFK Medical Center
Atlantis, Florida

Solution Spotlight

- AcuDose-Rx®
- NarcStation™
- PACMED™

Results

- Created a package-on-demand model
- Decreased daily cabinet pick time from 7.5 hours to under 2 hours
- Reduced cabinet fill labor by 75%
- Consolidated storage and packaging for 80% of pharmacy inventory
- Realized savings ranging from 2-50 cents per dose by bulk buying
- Automation and integration among equipment and systems supports BPOC, electronic MAR and CPOE systems

Overview

McKesson solutions helped JFK Medical Center implement inventory optimization efforts that support a highly decentralized distribution model, helped enable bar-code scanning for medication administration, and established the foundation for future enhancements including a computerized physician order entry (CPOE) system.

The Challenge

JFK Medical Center is a 460-bed acute care medical/surgical facility specializing in cardiovascular care, neuroscience, oncology services, orthopedics and bariatrics. JFK also is part of HCA, the nation's leading provider of healthcare services through a network of 163 hospitals and 103 freestanding surgery centers. Located in Palm Beach County, Florida, JFK serves one of the country's oldest per capita populations. A large number of part-time, winter residents can spike the hospital's 380 patient average daily census by one-third or more.

JFK focuses on providing geriatric cardiac care services. Each year, the hospital performs up to 400 open-heart surgeries and 7,000 cardiac catheterization procedures. This emphasis enables the 29-FTE pharmacy staff to adapt its practice to best meet patient needs. The pharmacy staff provides medications via a well-established decentralized medication dispensing model. More than 90 percent of the 9,000 daily patient doses are dispensed from 45 AcuDose-Rx automated medication cabinets located on nursing units and in procedural areas. This dispensing model also set the stage for subsequent improvements such as bedside bar-code scanning of medications and electronic medication

administration record (EMAR) initiatives that launched late in 2004.

Michele Weizer, PharmD, BCPS, is the pharmacy automation and clinical coordinator at JFK and chair of the Florida Board of Pharmacy. According to Weizer, a smooth transition to bedside scanning and EMAR required an automated solution for polling and filling cabinets with ready-to-scan unit-dose medications.

Answers

To establish this foundation for bar-coded medications, JFK selected McKesson's PACMED high-volume, oral solids packager. At JFK, PACMED manages approximately 420 medications representing approximately 80 percent of the pharmacy's inventory based on volume. "It stores and packages our biggest movers," Weizer said. "With few exceptions, our rule of thumb is that PACMED manages any medication that is administered 30 times or more per month."

JFK's primary medication administration times are 9 a.m. and 9 p.m. Shortly after nurses complete medication passes, pharmacy technicians use PACMED to electronically poll the AcuDose-Rx cabinets for restocking. Using Connect-Rx® software that integrates PACMED with all of McKesson's pharmacy and nursing automation solutions on a single system with one interface, the technician polls each cabinet, generating both a PACMED list and also a manual pick list for IV fluids, injectables, and other non-solids.

"We do batch fills for five to six cabinets at a time," Weizer said. "The software allows us to specify any cabinet or cabinet

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Michele Weizer, PharmD, BCPS
Pharmacy Automation and
Clinical Coordinator
JFK Medical Center

group, in any order. We like that flexibility. Normally, our technicians can poll all cabinets, produce packages, and have everything ready for delivery in about one hour, including the manual picks.”

The Results

With PACMED providing the medication bar code foundation, JFK completed its bedside scanning and EMAR initiatives several years ahead of schedule. In turn, this enabled the hospital to move ahead with related projects like implementing CPOE. “Supported by PACMED, our success with bedside scanning gives us a great basis for CPOE,” Weizer said. “We’ll use the extra time to help ensure that we develop a solid, safe system.”

PACMED also enabled JFK’s pharmacy to implement a lean, low-waste system to deliver bar-code medications in a packaging-on-demand setting. PACMED reduced cabinet restocking labor by 75 percent compared to manual processes, while handling 80 percent of the hospital’s oral solid medication needs. Although JFK has one weekday, daylight shift technician dedicated solely to packaging duties, technicians on all shifts are cross-trained on the equipment and processes.

At the same time, PACMED’s greater accuracy helps to streamline quality control for JFK’s pharmacists under state Board of Pharmacy rules. “We go beyond what’s mandated,” Weizer noted. “A pharmacist completes a 100 percent check

on medications, expiration dates, and lot numbers during PACMED canister filling. Packaging runs are monitored for quality and correctness, and we perform daily audits to verify that PACMED is picking correctly, and also bar code scannability spots checks. Now, the only time we get bar code rejects is when a nurse accidentally tears the medication package prior to administration.”

Automation also lowers inventory and associated costs, Weizer noted. “When technicians fill cabinets manually, the tendency is to overfill. But PACMED eliminates any guesswork. We set the restock quantity for each cabinet and PACMED won’t exceed it. This helps us to maintain a well-balanced inventory.”

Weizer said that today’s greater availability of generics has translated to less cost savings when buying and packaging bulk medications compared with several years ago. However, she said, JFK still realizes cost savings by buying in bulk. “Our threshold to buy and package is ten cents per dose. If the drug costs more than that, I look to buy it in manufacturer-packaged form. Right now, our mix is about 80 percent bulk and 20 percent manufacturer packaged.”

Most important of all, Weizer said, is that JFK patients benefit from the enhanced safety of bedside scanning and from a more direct role by pharmacists in patient care, while JFK gains better accountability for charge capture and inventory control.

McKesson

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McKesson Automation Solutions

500 Cranberry Woods Drive
Cranberry Township, PA 16066
(724) 741-8000

www.mckesson.com