

CASE STUDY

Parata's System of Compliance Packaging Scales Quickly and Integrates Smoothly

Pharmacies and patients benefit from pouch packaging technology.



Paul Magno, BS Pharm, RPh
Manager, Outpatient Pharmacy
Ambulatory Care Programs
~ Boston Medical Center

Paul Magno manages critical patient access programs in the Outpatient/Retail Pharmacy Department for Boston Medical Center. The Medication to Bedside, Medication Adherence Packaging, Concierge Service and My Medicine Health programs assist patients with their compliance and persistence of medication therapies. Team engagement ensures the success of these programs, but more importantly, positive impact on the health of our patients.

Paul was born in Newton, MA and raised in Waltham, MA. He received his BS in Pharmacy from the Massachusetts College of Pharmacy and Allied Health Sciences. He is completing his Masters Degree in Healthcare Administration at Louisiana State University, Shreveport.



Sebastian Hamilton, BS Pharm, RPh, MBA, Pharm.D
Director Outpatient/Retail
Pharmacy Services
~ Boston Medical Center

Dr. Sebastian Hamilton manages the outpatient/retail pharmacy department for Boston Medical Center. Leading a highly motivated pharmacy team of over 200, 1.3 million prescriptions a year are processed from three on campus pharmacies and an off-campus mail order pharmacy generating over \$300M in total revenue a year for BMC.

Dr. Hamilton, born in Harlem NY and raised in Bronx, NY, received his BS in Pharmacy from Long Island University (Brooklyn), MBA in Health Care Administration from Wilmington University, and Doctor of Pharmacy from the University of Florida (GO GATORS!). Dr. Hamilton currently serves on the Massachusetts Board of Registration in Pharmacy as a professional member.

PRIMARY INTENDED OUTCOME

Poor medication compliance contributes to chronic disease complications and reduced quality of life for patients; it also greatly increases healthcare costs. The Centers for Disease Control and Prevention estimates that inadequate compliance costs between \$100 and \$300 billion yearly in the United States.

Parata provides innovative medication pouch packaging technology that drives growth and efficiency for pharmacies, while providing convenience and improved well-being for patients and caregivers.

THE CHALLENGE

Medication compliance is crucial to improve chronic disease outcomes and reduce healthcare system costs. Research indicates that special reminder packaging incorporating the date and time for dosing, can increase medication compliance. "Our demographic struggles with taking medication," said Paul Magno, Ambulatory Care Program Manager for Outpatient Pharmacy at Boston Medical Center. "We are the largest safety net hospital in New England, and five or six languages are used on a daily basis, adding to the challenge."

Smaller pharmacies interested in offering compliance packaging often start out with a manual system, which can be difficult to scale when business grows. "BMC had been using an older compliance packaging system for years, and the

CASE STUDY

THE BENEFITS OF COMPLIANCE PACKAGING

Medication compliance is a complex behavior that is influenced by a number of factors, including complex dosing regimens, cognition or mental health issues, and language barriers. Research has shown that specialized compliance packaging has a positive impact on a variety of outcomes.

INCREASED MEDICATION ADHERENCE.

Patients who receive medications packaged by dose increase their compliance. One study showed that patients using adherence packaging increased their medication compliance from 62% to 90% in three months.

REDUCED MEDICATION WASTE.

Medication noncompliance results in doses that are not taken at all. A study showed that specialized packaging reduced unused doses by 29%.

IMPROVED CLINICAL OUTCOMES.

Patients who take their medications as directed and refill prescriptions on time do better. Researchers found that hypertension patients receiving medication in compliance packaging had reduced diastolic blood pressure.

INCREASED PHARMACY PROFIT.

Medication adherence services including special packaging improve the number of chronic medication fills. One study showed compliance packaging increased yearly profit per patient by approximately \$350.

number of patients served was relatively small, 50 to 100 patients a month," said Sebastian Hamilton, Director Outpatient/Retail Pharmacy Services at Boston Medical Center. "As the pharmacy program grew to over 900 patients a month, with each patient receiving on average eight medications, it became clear that we needed to better manage this program using automation."

THE DECISION

Manually packaging medications is a tedious process that requires pharmacists to complete each patient's monthly supply. This increases labor costs and takes pharmacists away from providing direct patient care. Manual packaging is also less accurate. Boston Medical Center saw this problem emerging and took steps to correct it.

"We began to see an increase in packaging errors due to pharmacists being stressed to meet the daily volume needed for patients to continue their medication therapies without interruption," said Hamilton. "In the interest of patient safety, it was decided not to add any more patients into the medication compliance program until we developed a process to provide this service more efficiently and safely."

Parata's ATP® 2 Pouch Packager packaging units offer a reduced need for manual labor combined with accuracy and scalability in a relatively small footprint. The system's ability to streamline and automate the pharmacist medication process, which eliminates about 90% of the check time, was also important to Boston Medical Center. The inclusion of staff training and ongoing customer service also influenced the decision.

"[Their status as] industry leader in adherence packaging combined with Parata's ability to provide proper training and ongoing support were also key factors in leading us to make this purchase," said Magno.

THE RESULTS

Automated compliance packaging streamlines the process and frees up staff. "In the past we had a very manual process, generating labels and requiring a tech to count meds into vials, which were then sent to a pharmacist to place

CASE STUDY

one-by-one into a pouch or card cavity,” said Magno. “Now we transmit the information electronically to the filling unit and that automatically pouches up most of our packaged meds.”

Since implementing Parata technology, Boston Medical Center has increased total output by more than 16%. “I would say that is directly related to the automated packaging units,” said Magno. “More and more complex care patients are enrolling in our program because of the adherence package benefit.”

Adherence packaging is safer, as well as more convenient for patients. The Parata ATP unit utilizes AdherePac pouches and seals each dose in a separate, perforated area. “If a patient is traveling overnight or to a group home, they don’t need to take an entire box of pouches. They can take just what they need,” said Magno.

Boston Medical Center utilizes two differently sized ATP packaging units, as well as Parata’s BullsEye Tablet Splitter and their InspectRx® Pouch Inspector unit. The InspectRx machine works in tandem with the ATP units and identifies 12 physical characteristics to ensure medications are placed in the correct pouches. The unit also captures images of every pouch filled, creating an accurate visual record of all medications dispensed.

THE CONCLUSION

Implementing Parata’s ATP units has increased Boston Medical Center’s output and reduced overhead at the same time. “We’ve been able to produce a high number of packages safely per day, our labor cost to produce packaging has reduced, and we are able to scale to meet demand safely without a proportional increase in labor costs,” said Hamilton.

Boston Medical Center has plans to expand pharmacy operations from 9:00 a.m. to 5:30 p.m. to 24 hours a day. “This means our pharmacists could do outreach to patients during the day, and the Parata units would fill pouches at night for sending out the next day,” said Magno.

TCGRx and Parata merged at the end of 2018 to offer the most comprehensive pharmacy technology portfolio.



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From adherence packaging and vial-filling to workflow and patient experience solutions, Parata's got you covered. Our technology drives efficiencies and keeps your pharmacy teams engaged with patients to improve medication adherence and boost customer loyalty. Explore the most comprehensive pharmacy automation portfolio at parata.com.

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