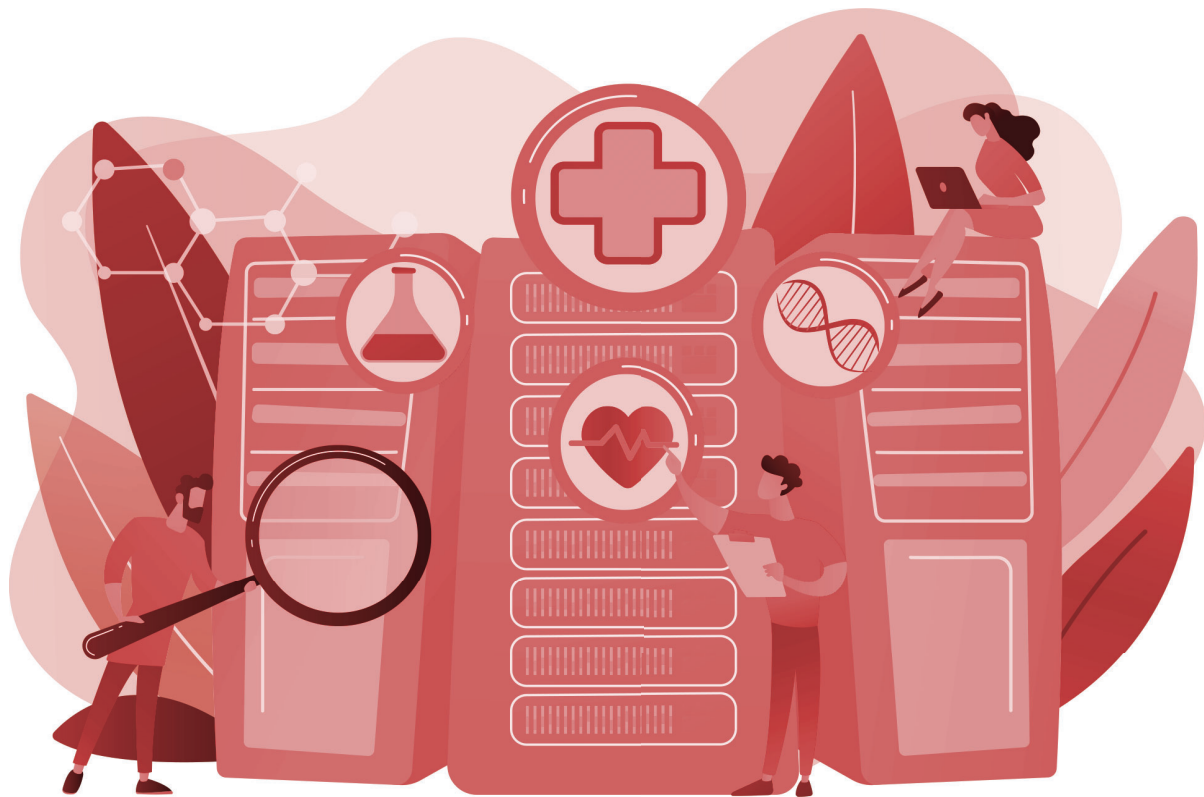


TOP LTC PHARMACY BOTTLENECKS

And How To Fix Them

IN LONG-TERM CARE (LTC) PHARMACIES

A bottleneck in the pharmacy workflow can significantly impede operations, affecting both pharmacy performance and patient care. Identifying and addressing these bottlenecks is crucial for enhancing efficiency, safety, and ultimately, the health outcomes of those under a long-term facility's care. This e-book takes a look at the top seven common bottlenecks encountered in LTC pharmacies and offers practical solutions to overcome them.



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BOTTLENECK 1: PRE-VERIFICATION REVIEW

The first bottleneck in an LTC pharmacy workflow typically occurs during the Pre-Verification Review (PV1), a critical stage where pharmacists verify medications before they are packaged and dispensed to patients. This process involves checking each prescription against patient records and drug interaction databases, which is essential for ensuring patient safety but can also be extremely time-consuming when done manually. This extensive manual verification not only slows down the pharmacy's overall workflow but also places significant demands on the pharmacists' time, potentially diverting their attention from other critical patient care tasks.

How to Fix PV1 Bottlenecks

Implementing advanced verification software can dramatically reduce manual efforts, streamline the process, and minimize the risk of errors by automating the process of checking prescriptions against various databases and patient records. This significantly speeds up the pharmacy workflow by freeing up pharmacists to focus more on delivering direct patient care. Automation in the verification process also increases the accuracy of medication dispensing, ultimately improving patient safety and service quality in LTC pharmacies.

BOTTLENECK 2: INVENTORY MANAGEMENT

Long-term care pharmacies manage a variety of medications, including scheduled, controlled, and, over-the-counter drugs, each with unique storage, handling, and regulatory requirements, adding layers of complexity to inventory management. LTC pharmacies also cater to a large population of residents with diverse medical needs, sometimes across multiple locations, resulting in a high volume of prescriptions that require precise tracking of medication stocks to ensure all patient needs are met without delays or errors. Given these factors, it's clear that inventory management in LTC pharmacies involves much more than simply keeping track of stock levels—it encompasses a broad set of activities, each requiring time and careful attention, making it a major bottleneck in pharmacy operations.

How to Fix Inventory Management Bottlenecks

Software solutions can automate many aspects of inventory management, including tracking stock levels, managing orders, and updating inventory records, which can provide real-time visibility into stock levels, usage trends, and forecast needs. This can enable pharmacies to maintain optimal inventory levels and reduce shortages or excesses, significantly reducing manual workloads while minimizing errors.

Centralizing inventory management for LTC pharmacies that operate across multiple locations helps streamline processes and reduce redundancy by providing a comprehensive view of inventory across all sites, enabling more efficient distribution of medications.

BOTTLENECK 3: MANAGING NDC CHANGES

National Drug Codes (NDC) changes are frequent in the pharmacy industry with an average of five changes a week, leading to discrepancies between the Pharmacy Management System (PMS) and actual on-hand inventory. This can complicate inventory management and billing and can create a time-consuming bottleneck during medication dispensing if the drug in the PMS differs from the drug in inventory. Keeping the Pharmacy Management System (PMS) updated with the latest NDC information requires continuous monitoring and adjustments, which is also time-intensive.

How to Fix Bottlenecks Caused by NDC Changes

Some of the latest pharmacy automation systems significantly mitigate the bottleneck of frequent National Drug Code (NDC) changes in LTC pharmacies by automatically updating Pharmacy Management Systems (PMS) with real-time syncing of NDC data, enhancing inventory tracking, and reducing dispensing errors through barcode scanning verification.

These systems maintain data consistency for compliance and facilitate efficient communication with suppliers, allowing quick resolution of discrepancies. Additionally, automation reduces operational demands by handling complex updates and generating detailed audit trails, improving overall pharmacy efficiency and patient safety without extensive manual intervention, and allowing staff to focus on other critical areas of patient care.

BOTTLENECK 4: PACKAGING MEDICATIONS

The medication packaging process in LTC pharmacies is labor-intensive and error-prone. LTC pharmacies often deal with a high volume of prescriptions that need to be packaged into individualized dosages for each patient. The need for customized packaging, which may include multi-dose or unit-dose packaging, increases the complexity and time required to prepare medications. In pharmacies that have not fully adopted automation, the packaging process may still be manual, which is not only incredibly time-consuming but also prone to human error. This can lead to medication errors such as incorrect dosing or missed medications.

Proper labeling is also critical in medication packaging to ensure that patients receive correct and understandable information. The need for clear, accurate, and compliant labeling can complicate the packaging process, especially when dealing with a diverse range of medications and patient needs.

How to Fix Medication Packaging Bottlenecks

For LTC pharmacies that have not implemented automation equipment, investing in automated packaging systems can significantly enhance both efficiency and accuracy. These systems easily and accurately manage the high volumes of prescriptions typical in LTC settings and tailor packaging to individual patient dosages, drastically cutting down manual labor and error rates. Automated systems help ensure compliance with regulatory standards for labeling and handling, streamlining the entire packaging process.

04

BOTTLENECK 4: PACKAGING MEDICATIONS

For LTC pharmacies already utilizing automation, upgrading or refining their existing systems can further performance improvements and efficiencies in workflow. This may include integrating more advanced software to improve the interaction between packaging systems and Pharmacy Management Systems (PMS), or incorporating modules designed for special handling needs like refrigeration for temperature-sensitive medications.

Regardless of the current state of automation, pharmacies should evaluate their packaging methods—considering options like blister packs, pouches, or strips—and possibly adopt multi-dose packaging systems. These systems compile a patient's doses for specific times into single packages, simplifying medication administration for caregivers, reducing errors, and enhancing patient care. By critically assessing their particular challenges and requirements, LTC pharmacies can select the most effective solutions to mitigate bottlenecks and boost overall operational efficiency.

05

BOTTLENECK 5: POST PACKAGING VERIFICATION (PV2)

Post-packaging verification (PV2) can be a significant bottleneck in LTC pharmacies due to its crucial role in ensuring the accuracy and safety of packaged medications before they are dispatched to patients. This process typically involves pharmacists or trained technicians manually checking each packaged medication against the original prescription to confirm the correct dosing, drug type, and patient details. Given the high volume of prescriptions handled daily in LTC settings, this manual verification can be incredibly time-consuming and labor-intensive. Additionally, human error during this final verification step can lead to medication errors, potentially compromising patient safety. The bottleneck is exacerbated during peak times or when staffing is limited, further delaying the delivery of medications.

How to Fix PV2 Bottlenecks

The solution to the Post-Packaging Verification (PV2) bottleneck in LTC pharmacies is adopting automated verification systems. These systems use advanced imaging technology to inspect each packaged medication, checking for errors such as incorrect medications, damaged items, or missing doses. The system then alerts pharmacists only when discrepancies are detected, allowing them to focus on verifying and rectifying specific issues rather than manually checking each package, saving an enormous amount of time.

06

BOTTLENECK 6: PREPPING PACKAGED MEDICATIONS FOR DELIVERY

The prepping and packaging of medications for delivery or shipment in LTC pharmacies can create significant bottlenecks in the workflow, primarily due to the manual labor involved in preparing medications for transport. This process typically requires medications to be either rolled or fanfolded and then neatly packed into boxes, which is time-consuming and prone to errors if done manually. The physical handling and organization of multiple medication types into specific packaging formats can slow down operations, especially when dealing with large volumes typical in LTC settings.

How to Fix Bottlenecks Due To Prepping Packaged Medications

A solution to this bottleneck is the adoption of automation robots that can handle the rolling of medications. While no current automation machines offer fanfolding capabilities, those that can automatically roll medications streamline the process significantly. These robots efficiently prepare and pack medications into compact rolls that fit neatly into shipping boxes, optimizing space and reducing manual handling requirements. This automation not only speeds up the process but also enhances accuracy and reduces the likelihood of packaging errors. By integrating such robotic systems, LTC pharmacies can ensure faster, more efficient, and reliable preparation of medications for delivery, ultimately improving workflow efficiency and service quality.

BOTTLENECK 7: ENSURING ACCURATE MEDICATION ADMINISTRATION

In LTC pharmacies, a significant bottleneck actually arises with the caregivers when they administer medications to patients. Caregivers are tasked with the critical job of ensuring each patient receives the correct medications in the correct dosages. Given that the average LTC patient takes eight pills daily, the process of manually sorting and verifying these medications can be both time-consuming and prone to human error, especially if the medications are packaged in single-dose blister packs. The risk of errors in medication administration not only impacts patient health but also adds pressure on caregivers who must meticulously verify each medication.

How to Fix Caregiver Bottlenecks Due to Ensuring Accurate Medication Administration

The solution to streamline this critical phase of workflow lies in automated multi-dose medication packaging like pouch packaging. This technology packages all the medications a patient requires for specific times into single, clearly labeled pouches, typically equipped with a barcode, which caregivers can scan to verify its contents at the point of administration. This system significantly reduces the time caregivers spend sorting and verifying medications, minimizes the chance of human error, and ensures greater accuracy in medication delivery. By simplifying the medication administration process, automated multi-dose packaging allows caregivers to focus more on patient care rather than the logistics of medication management, thereby enhancing the overall efficiency and safety of patient treatment in LTC facilities.

CASE STUDIES

Automation solution providers, like [Noritsu Pharmacy Automation](#), have been able to help LTC Pharmacies across multiple sectors to realize significant gains in efficiency and accuracy. It doesn't stop there though, improved patient satisfaction and ease of use for both patients and caregivers offer an added reason to upgrade your packagers.

Take a moment to browse this selection of case studies that showcase how choosing an automation solution from Noritsu has led to improvements in operations and ultimately, better patient care.



EVERSPRING PHARMACY

EverSpring Pharmacy is a full-service comprehensive pharmaceutical care provider, servicing a number of sectors across the industry. Adding Noritsu NX packagers and NV Verifiers led to more streamlined operations and increased production.



MEDICINE EXPRESS

Medicine Express are experts in Long Term Care Pharmacy services, and automation solutions have been integral in helping them update and expand their operations, allowing them to service more beds with a scalable solution that grows to fit their needs.

“THE STRIP POUCH PACKAGING SYSTEM HAS NOT ONLY IMPROVED OUR PHARMACY EFFICIENCY AND SAFETY, BUT THE ABILITY TO TIE INTO OUR eMAR [ELECTRONIC MEDICATION ADMINISTRATION RECORD] SYSTEM CREATES LESS STEPS IN THE ADMINISTRATION PROCESS”

Ross Brickley

Vice President of Pharmacy Services

~ Neil Medical



LOOKING FORWARD: THE FUTURE OF LTC PHARMACY OPERATIONS

From the initial stages of pre-verification review (PV1) to the final steps of ensuring accurate medication administration, each part of an LTC pharmacy workflow presents unique challenges that can create time-consuming bottlenecks. Solutions such as implementing advanced verification software, utilizing robust inventory management systems, and embracing packaging and delivery automation play pivotal roles in streamlining operations. Automated systems reduce manual labor, minimize error rates, and ensure compliance with regulatory standards, directly impacting the quality of care provided to patients.

Looking to the future, the role of automation in LTC pharmacies is not just beneficial but essential. As the demand for precise and efficient healthcare delivery increases during a time when the aging population is increasing, LTC pharmacies must continue to innovate and adopt new technologies like automation equipment to stay ahead of the curve. This strategic move will not only alleviate current bottlenecks but also prepare pharmacies for future challenges, ensuring that they can deliver the highest standards of care while still maintaining maximum efficiency. As we move forward, the integration of cutting-edge technologies will define the success and sustainability of LTC pharmacies, making them more resilient and responsive to the evolving needs of their patients.

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