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GLP-1s Aren't the Only Story

How Health Systems Are Building the Next Generation of Outpatient Pharmacy



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As health systems race to manage GLP-1 demand, pharmacy leaders are preparing for a broader transformation driven by specialty growth, biosimilars and an expanding range of temperature-sensitive therapies, creating new demands for medication storage, handling, inventory management and supporting technology.[12]

GLP-1 medications may be the headline. But for health-system pharmacy executives, they are only one part of a broader structural shift reshaping outpatient pharmacy.

Health-system pharmacy leaders are preparing for a future in which more therapies arrive as specialty medications, more products require cold-chain storage, more payer requirements shape fulfillment decisions, and more prescriptions come in boxed unit-of-use formats that traditional pharmacy workflows were not built to manage at scale. Many of these therapies are also high-cost medications with strict temperature controls and distribution logistics requirements, increasing the operational and financial consequences of inventory mismanagement. Rather than treating these pressures as isolated challenges, health systems can use them as a catalyst to rethink the outpatient pharmacy operating model.

THE MARKET IS MOVING BEYOND TRADITIONAL PRESCRIPTION FULFILLMENT

Health systems will need to consider central fill strategies that are rooted in a simple reality: outpatient pharmacy is becoming more complex faster than many operating models can absorb.

The growth of GLP-1s has made the issue more visible, but the larger trend is specialty pharmacy expansion. New oncology therapies, biosimilars, injectable products, refrigerated medications, and niche therapies with added compliance requirements are changing what health-system pharmacies must be prepared to dispense and manage.

As those needs evolve, many health systems are taking a broader view of central fill as more than a way to move high-volume refills out of retail pharmacies. For health-system pharmacies, central fill becomes the infrastructure that allows the organization to manage an expanding mix of therapies, service models, and patient needs.

That philosophy is especially important as biosimilars reshape inventory planning. Rather than managing one dominant product, pharmacies increasingly must stock multiple manufacturer options based on payer

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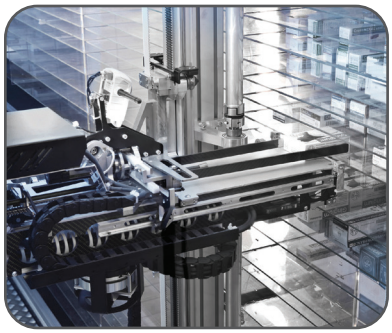
BD Vmax 160 for Central Fill

supports storage and fulfillment of boxed unit-of-use medications, including products that require refrigerated handling.



preference, patient access, and utilization patterns. Central fill operations now face a capacity, inventory, and payer-management challenge, not just a dispensing challenge.

WHY BOXED UNIT-OF-USE FULFILLMENT IS BECOMING A STRATEGIC ISSUE

One of the most important operational shifts is the rise of boxed unit-of-use medications. These products are often high-value, temperature-sensitive therapies that may require refrigeration and create new challenges around storage, expiration tracking, recall management, inventory visibility, and workflow design. As inventory values increase, the cost of waste, expired products, and suboptimal storage becomes increasingly significant for health systems.

Without end-to-end unit-of-use automation, boxed products and refrigerated therapies can create space and inventory-management challenges. Products can be stored across multiple refrigerators or backup locations that make it harder to maintain visibility, rotate stock efficiently, and ensure the oldest product was dispensed first. These processes are also highly labor intensive, requiring pharmacy staff to spend valuable time locating inventory, tracking expiration dates, managing stock rotation, and maintaining inventory accuracy across multiple storage locations. As pharmacies manage growing inventories of high-cost and specialty medications, leaders are increasingly focused on tools that improve storage efficiency and inventory control. Enhanced visibility and stock rotation capabilities can help reduce wasted medications, optimize refrigerated storage, and improve overall operational efficiency.

New to the U.S. market, BD's Vmax 160 for Central Fill system supports storage and fulfillment of boxed unit-of-use medications, including products that require refrigerated handling. The solution can track product information, manage expiration dates, lot, and serial numbers, and retrieve expiring inventory more efficiently than manual refrigerator-based workflows.

For health systems managing expensive specialty drugs, this kind of visibility is not just operationally convenient. It can affect waste, inventory carrying costs, staff productivity, and medication integrity.

AUTOMATION IS NOT REPLACING PHARMACY TEAMS. IT IS REPOSITIONING THEM

For health-system pharmacy leaders, the purpose of central fill automation is not simply to reduce manual work. It is to create more capacity for clinical work, patient support, and complex exceptions management.

Health-system pharmacies increasingly need teams to manage prior authorizations, adherence barriers, patient education, financial assistance, and follow-up for complex clinical therapies. That becomes harder when pharmacists and technicians are consumed by repetitive fulfillment tasks. Freeing up these valuable resources with automation allows the pharmacy team to focus on unique, complex patient needs while the rest of the high-volume workload flows through the automated workflow.

That shift can benefit the broader health system. Central fill operations can manage specialty and mail-order fulfillment as

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well as serve all of the outpatient pharmacy sites in a health system, allowing local teams to spend more time on patient-facing services while centralized operations handle eligible fulfillment work more efficiently. Using technology to fulfill prescriptions more efficiently via central fill gives outpatient pharmacy teams the benefit of time.

CENTRAL FILL IS BECOMING A PATIENT-ACCESS PLATFORM

The most advanced central fill operations are no longer only about throughput. They are becoming patient-access platforms. Central fill operations to manage specialty and mail-order operations can also include clinical work, patient follow-up, and financial advocacy. Leaders described teams that help patients navigate side effects, therapy initiation, and affordability. For injectable therapies, that support can be particularly important. As outpatient pharmacy becomes more complex, health systems need infrastructure that can support both operational scale and individualized care.

Centralized pharmacy infrastructure can also play a role in supporting rural access. Some communities may not have local pharmacies equipped to manage complex specialty therapies or intensive follow-up requirements. Through centralized operations, health systems can support patients and clinics across a wider geography while maintaining specialized capabilities in one scalable model.

For health systems facing pharmacy deserts, labor shortages, or uneven specialty access across a wide service area, centralized fulfillment may become an important access strategy, not just an efficiency strategy.

BUILD FOR THE FUTURE BEFORE THE FUTURE ARRIVES

As health-system pharmacies look to the future, one key lesson emerges: health systems should not build central fill around today's volumes alone.

Designing central fill with expansion points in mind, including the ability to add more robots, filling stations, packing capacity, track and inventory management, becomes more important as needs evolve. Starting with a goal to avoid building a facility that would be obsolete as soon as specialty, cold-chain, and unit-of-use demand accelerated becomes essential to future success.

GLP-1s may be driving urgency, but they are not the full story. The bigger story is that outpatient pharmacy is entering a new era of complexity. Specialty therapies are growing. Biosimilars are fragmenting inventory decisions. Boxed unit-of-use medications are changing fulfillment requirements. Cold-chain products are putting pressure on storage and handling workflows. Patients need more support, not less. And health systems need pharmacy models that can scale while preserving clinical capacity.

Designing a central fill that can evolve into the backbone of a more connected outpatient pharmacy strategy is the first step in being prepared for what comes next in pharmacy. For organizations still relying heavily on manual fulfillment, the question is not whether GLP-1 demand will continue. The question is whether their pharmacy infrastructure is ready for the broader transformation already underway.

[1] American Society of Health-System Pharmacists. *ASHP Executive Forums on Cold Chain Management of Pharmaceuticals in Health Systems. American Journal of Health-System Pharmacy.* 2023;80(22):1677-1684.

[2] American Society of Health-System Pharmacists. *For Biosimilar Implementation, One Size Doesn't Fit All. 2024*



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